

FIG. 1

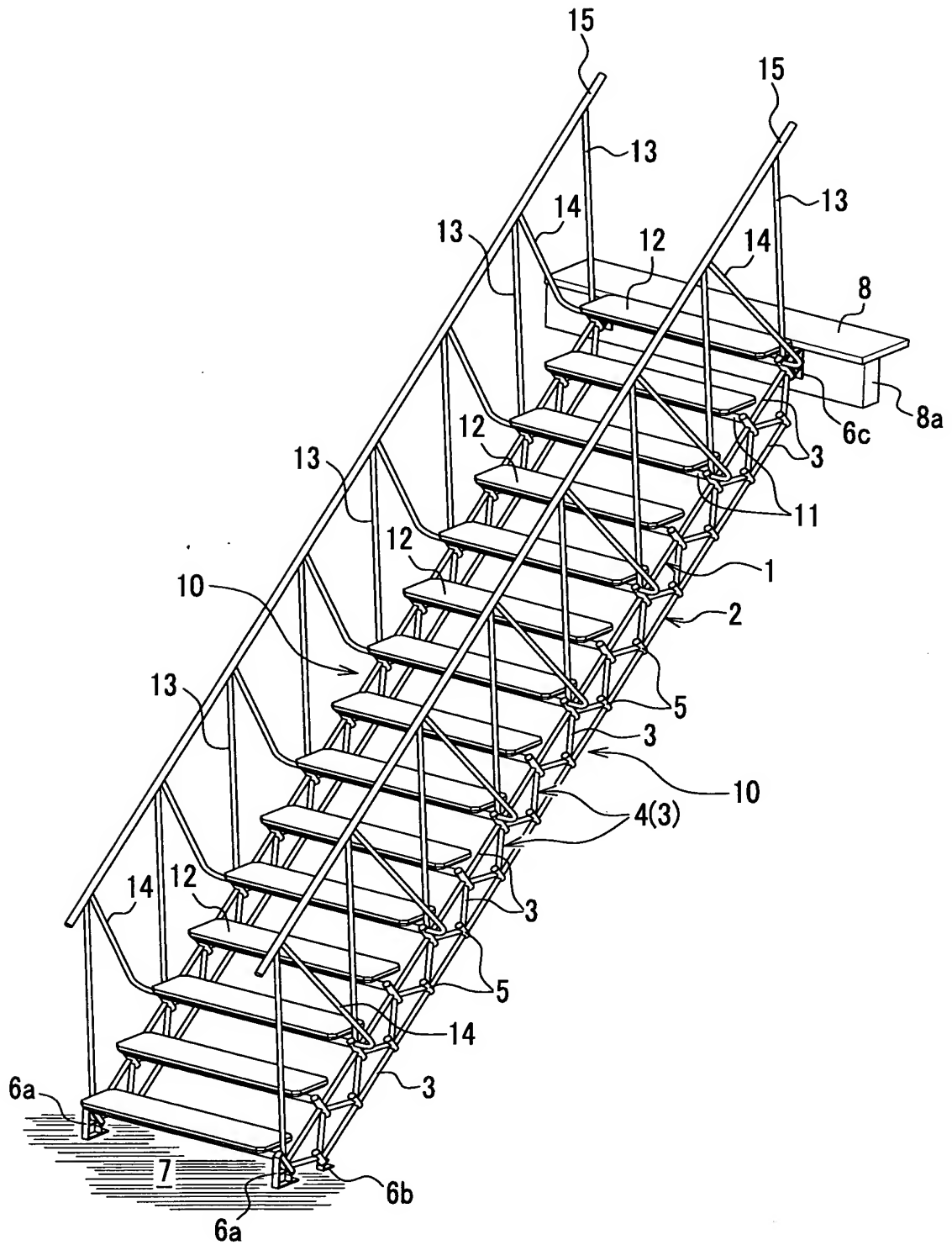


FIG. 2

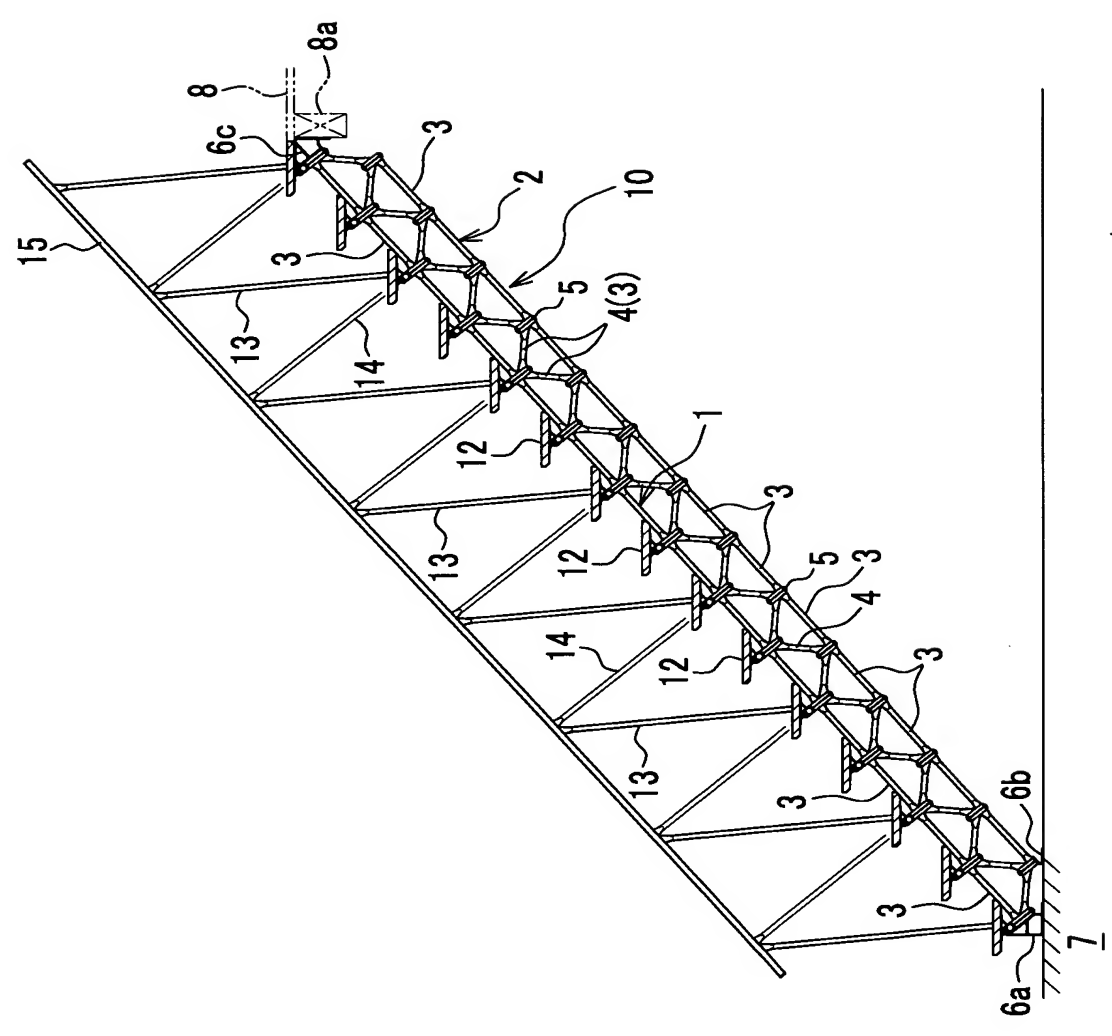


FIG. 3

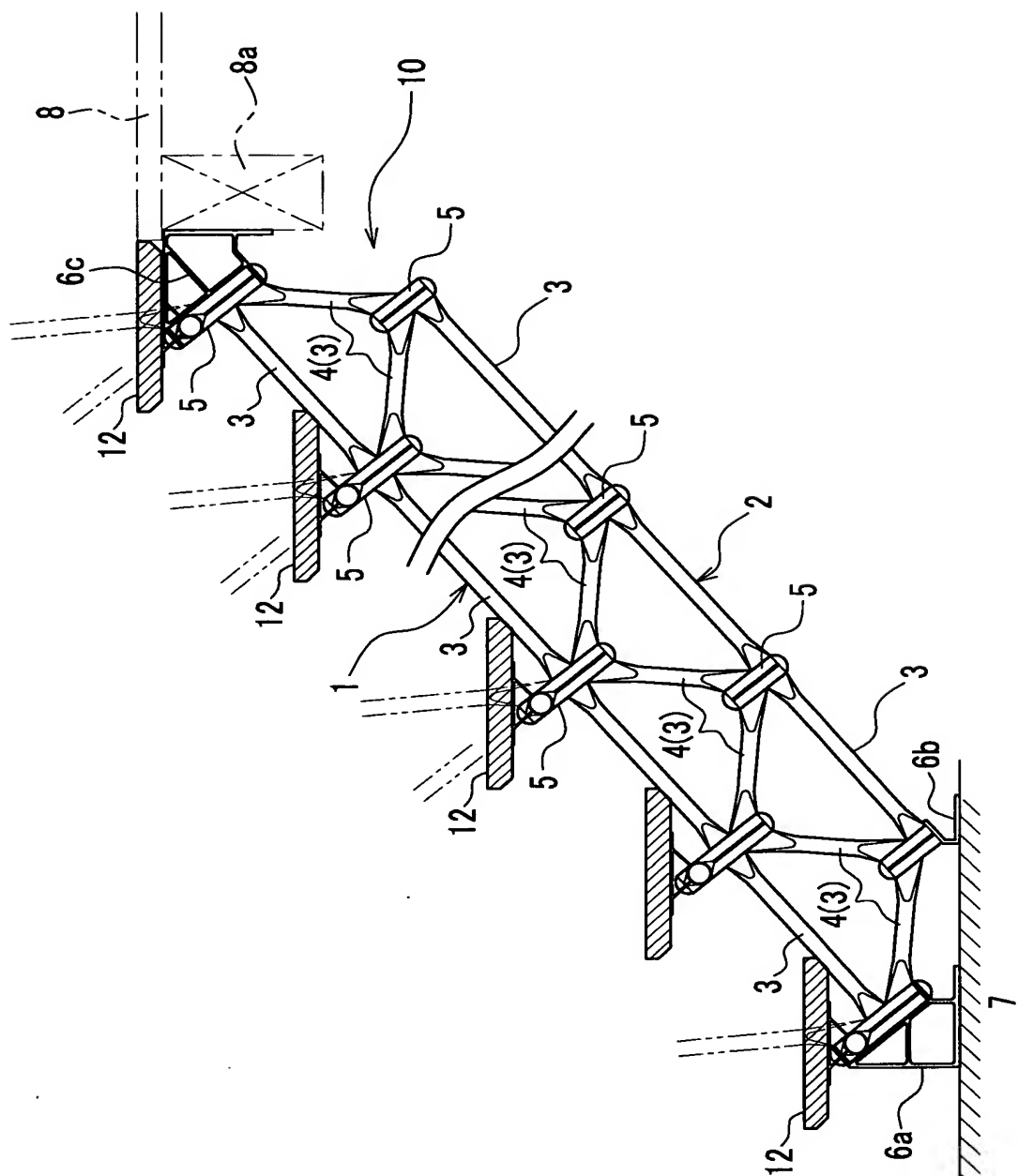
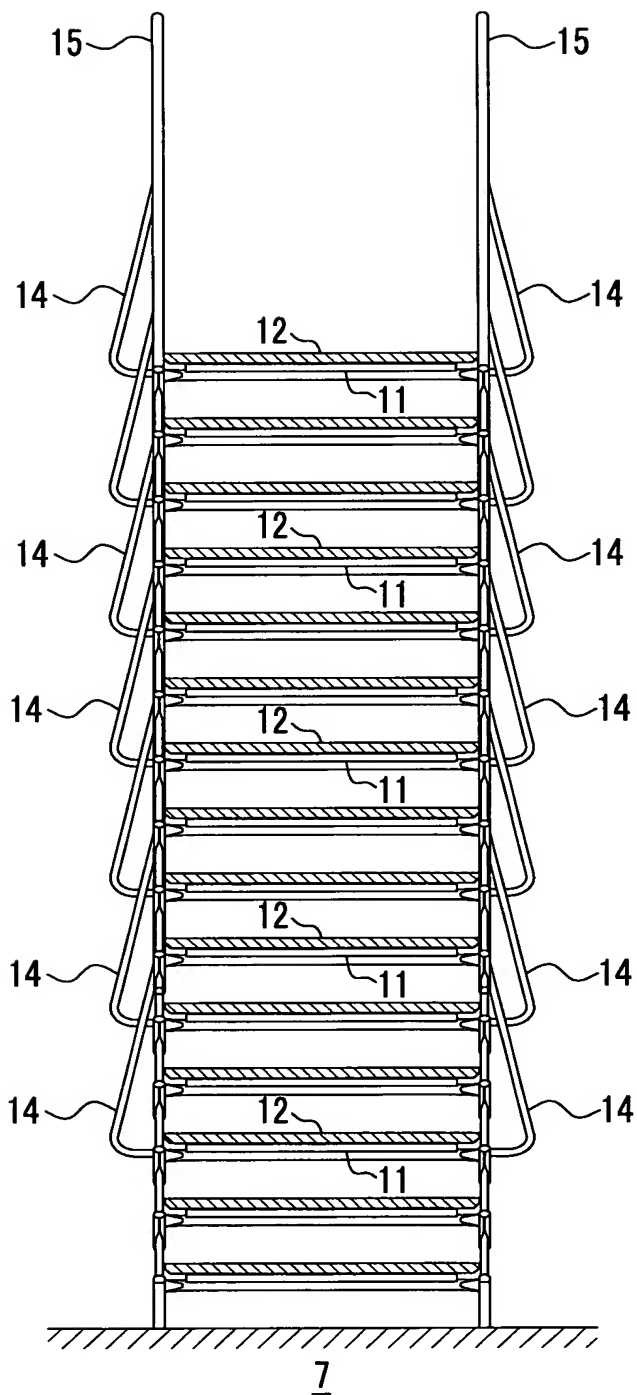


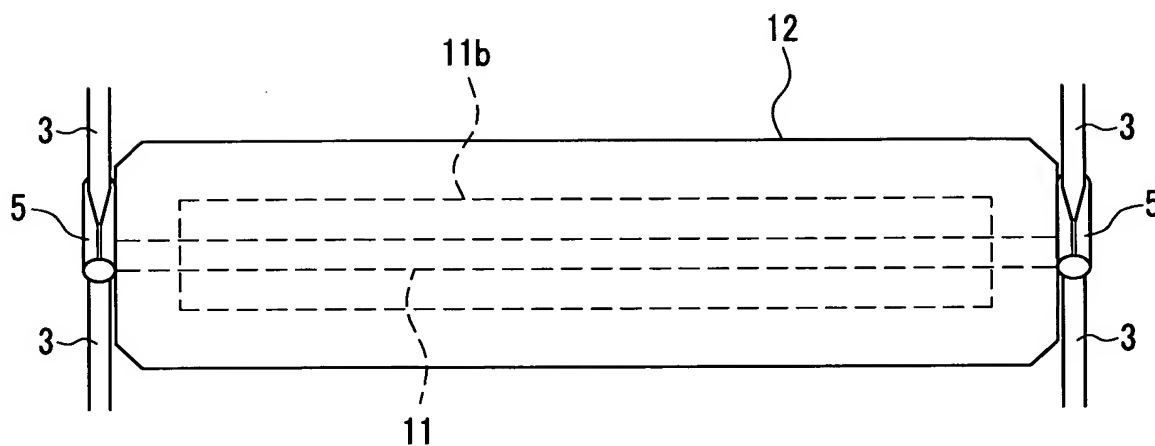
FIG. 4



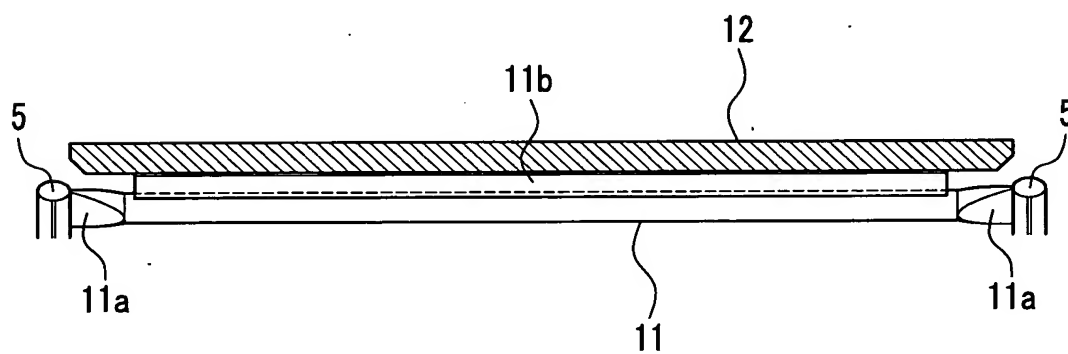
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FIG. 5

(a)



(b)



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FIG. 6

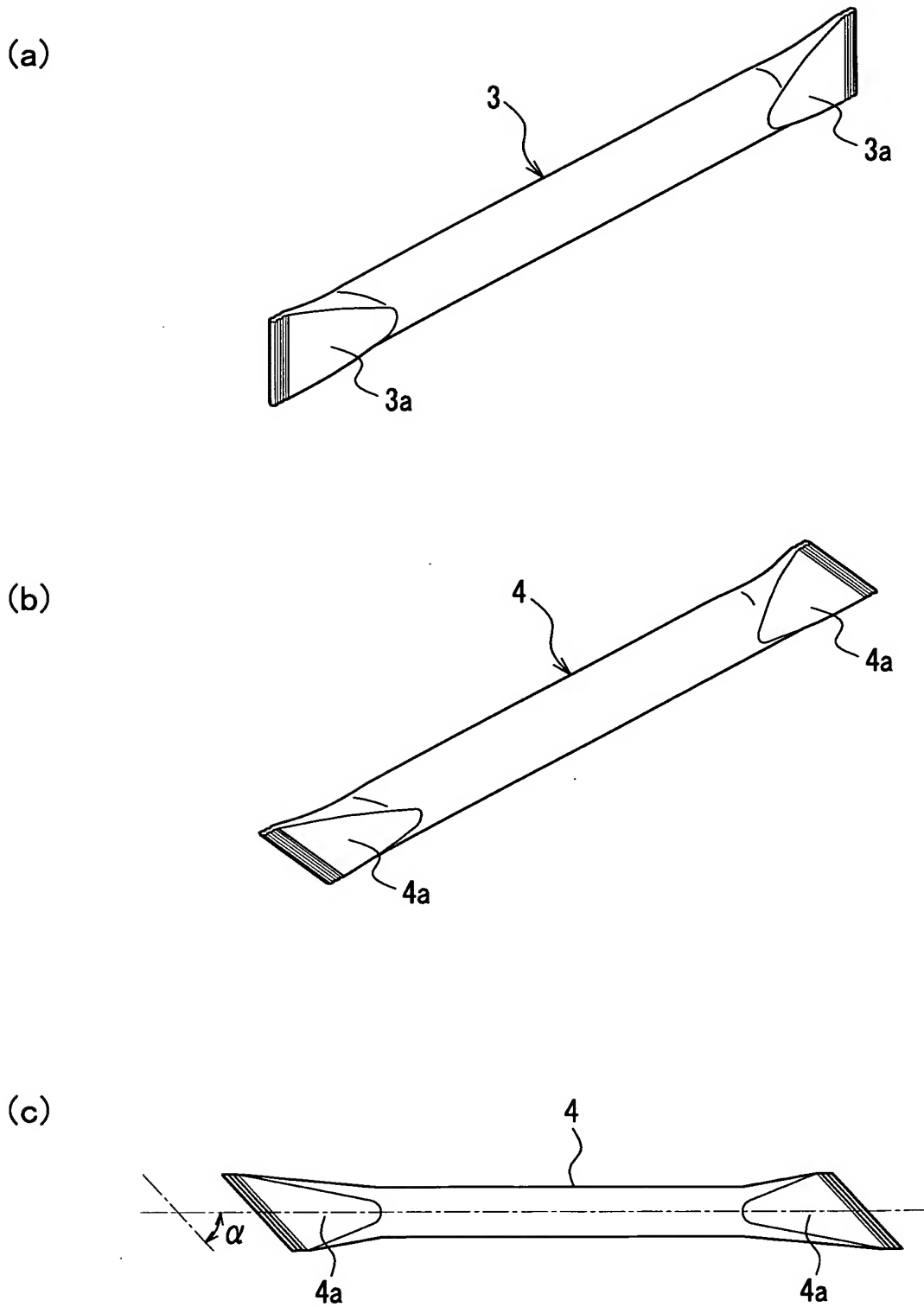
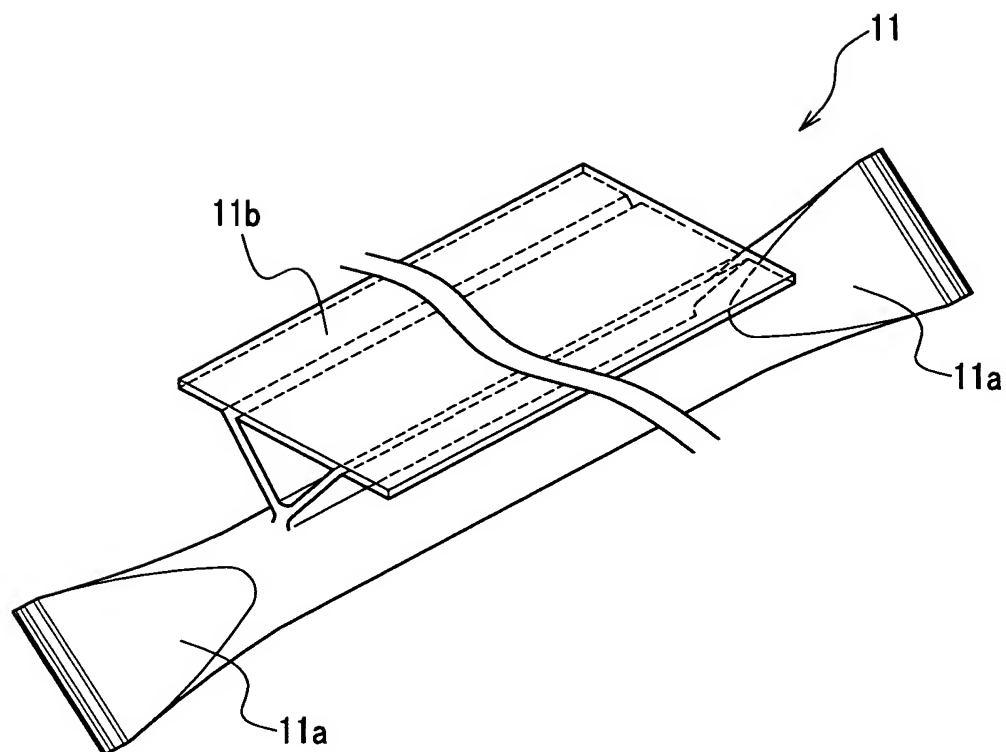
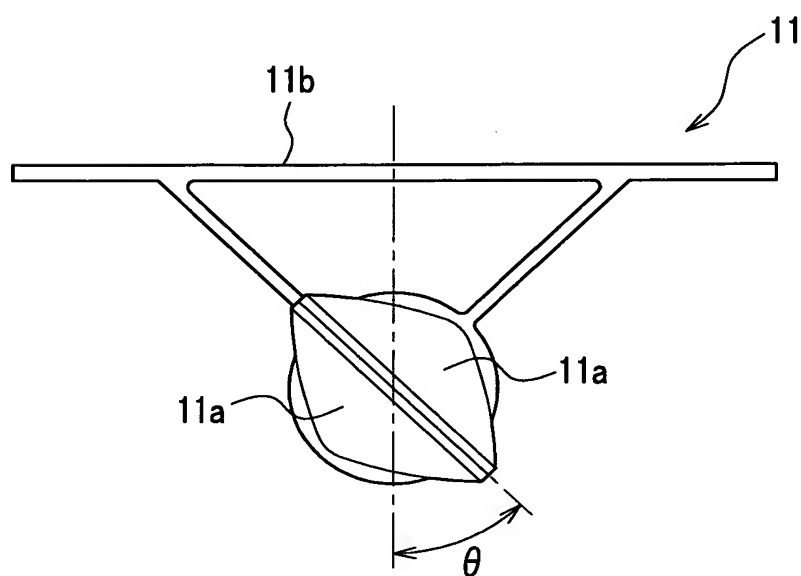


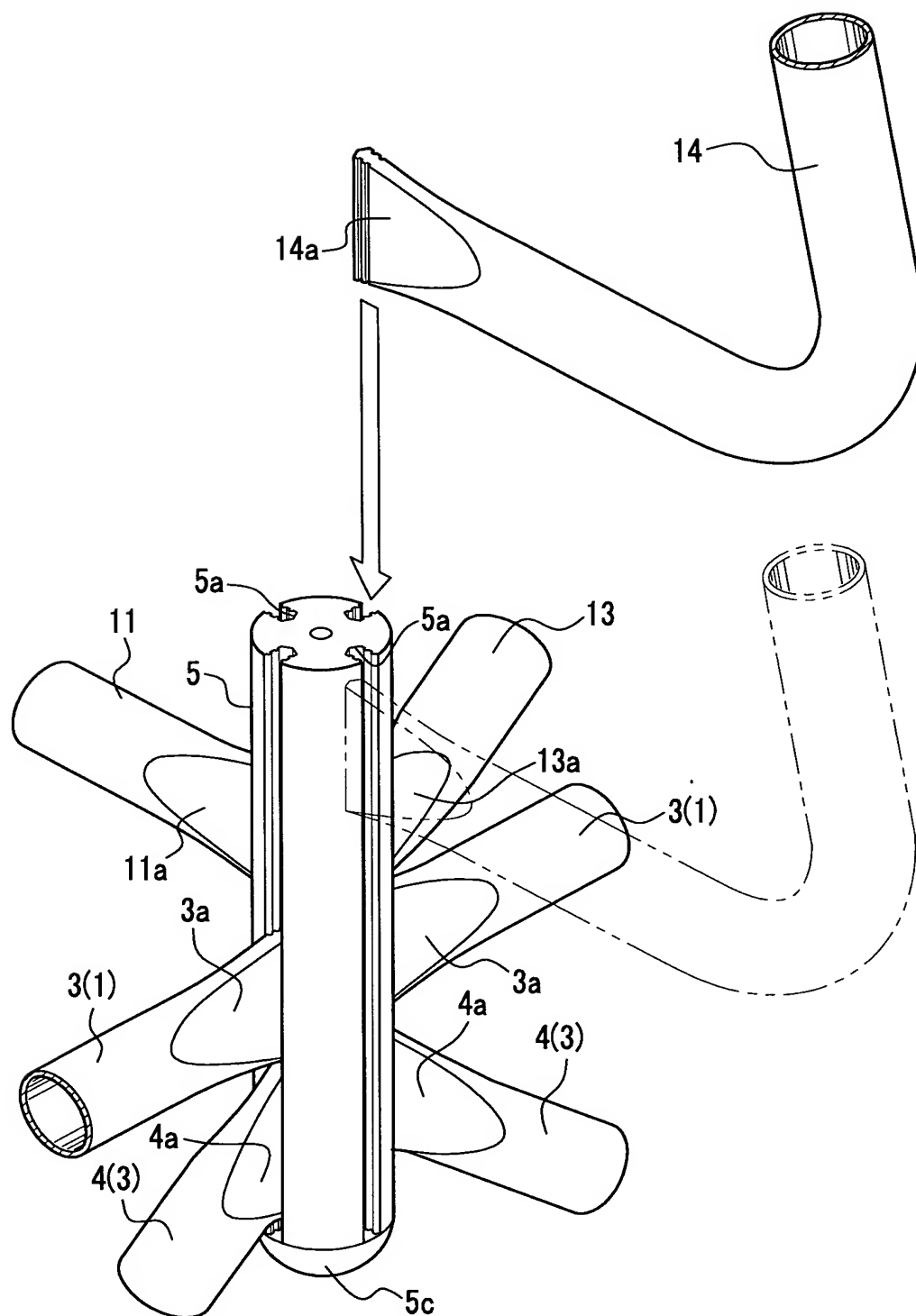
FIG. 7

(a)



(b)







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FIG. 9

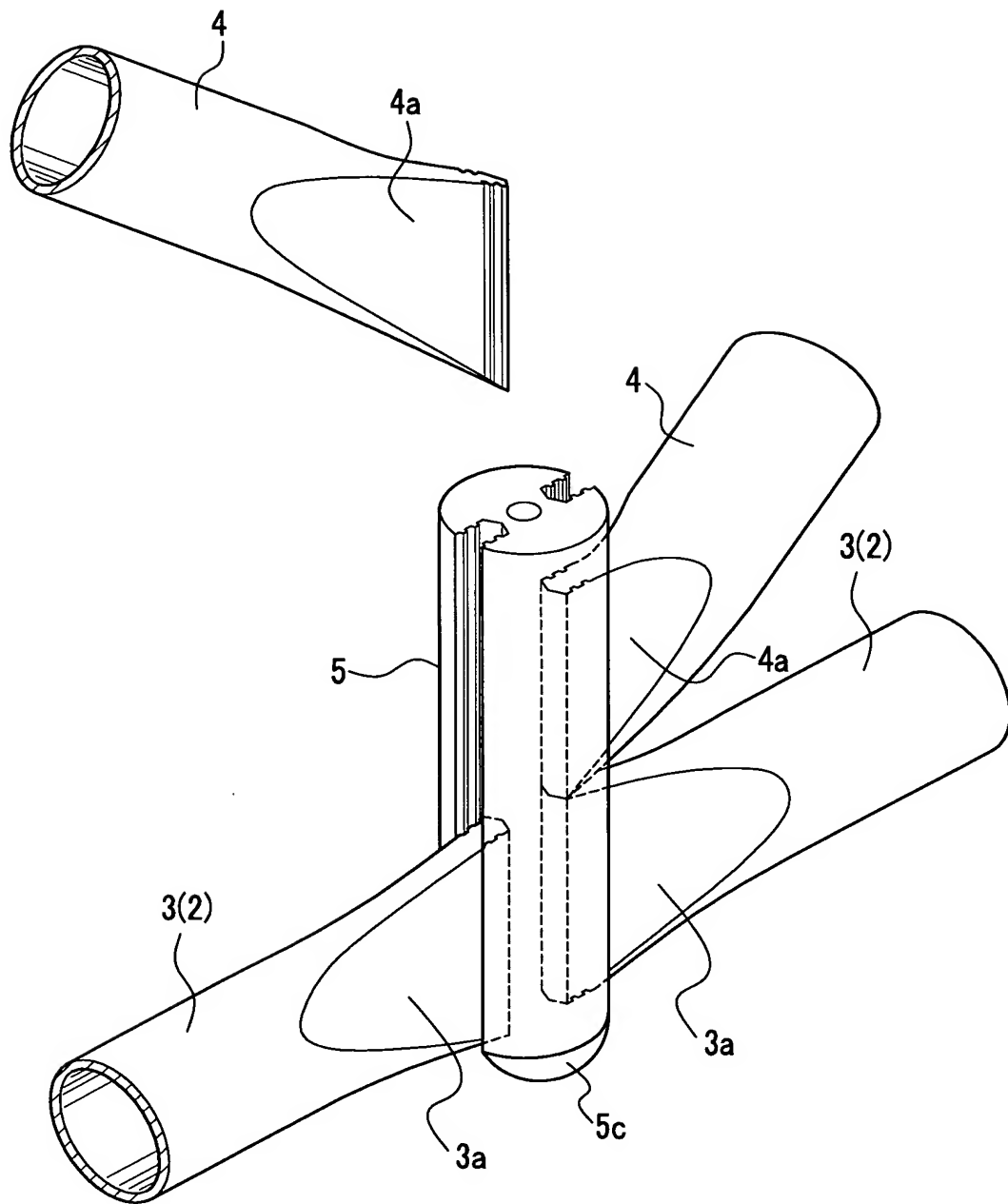


FIG. 10

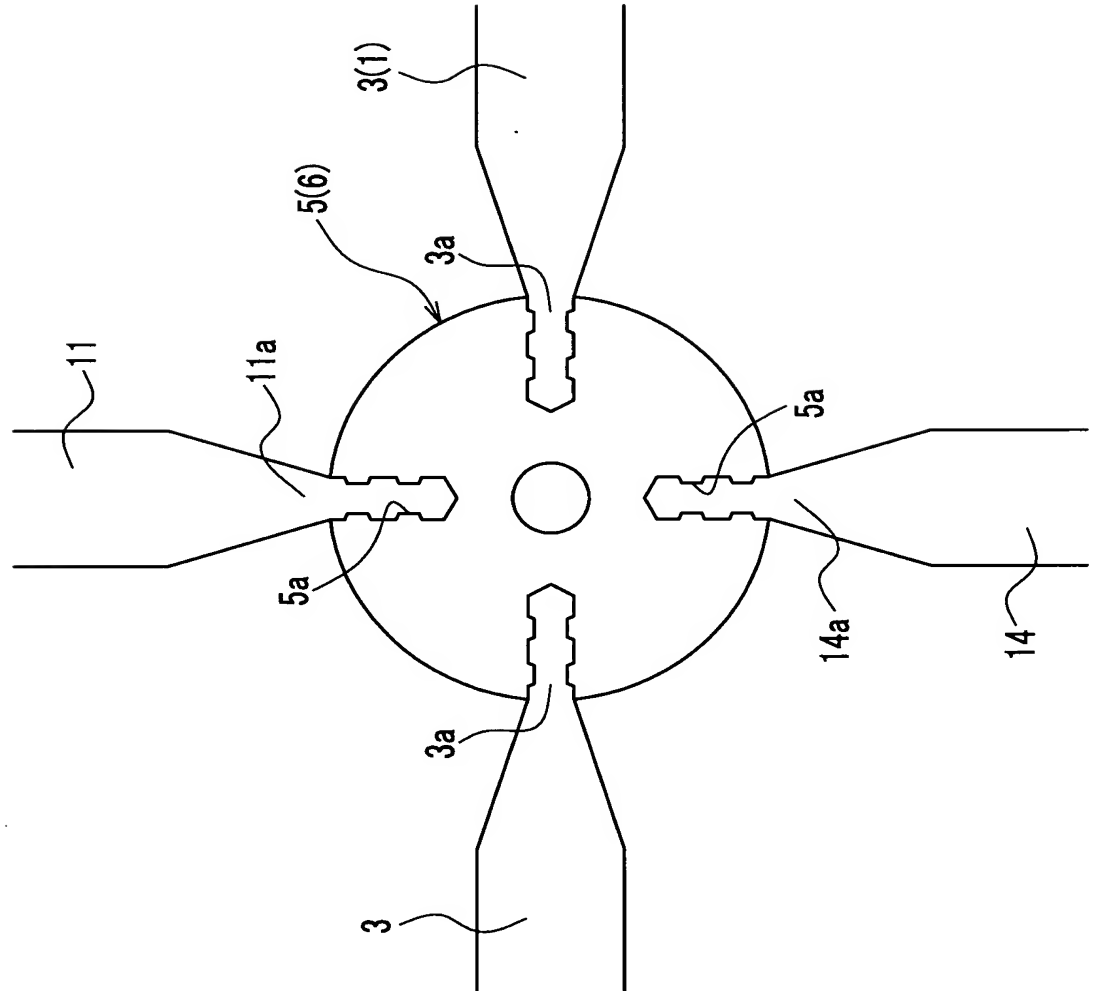


FIG. 11

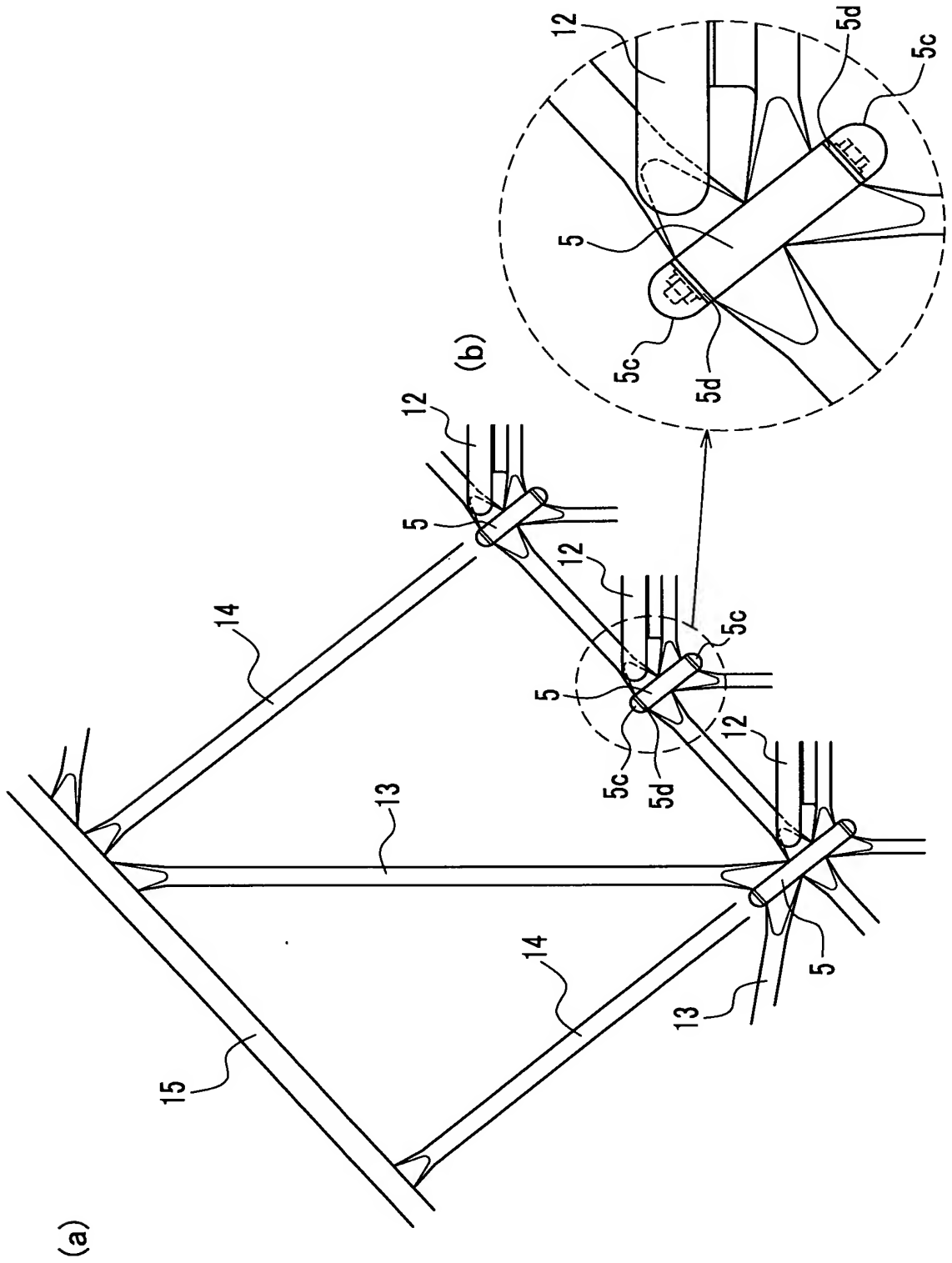


Figure 1 consists of three schematic diagrams labeled (a), (b), and (c), illustrating the operation of a needle assembly.   
 (a) The needle assembly is in a closed state. A needle (13) is housed within a sheath (14). The needle's tip (13a) is aligned with the sheath's tip (14a). A handle (15) is attached to the proximal end of the sheath.   
 (b) The needle assembly is in a partially open state. The handle (15) has been moved, causing the sheath (14) to retract and bend. The needle tip (13a) is now exposed from the sheath tip (14a).   
 (c) The needle assembly is in a fully open state. The sheath (14) is fully retracted, and the needle (13) is extended. The needle tip (13a) is shown penetrating a target (5). The sheath tip (14a) is bent at an angle  $\beta$  relative to the needle's longitudinal axis.

FIG. 13

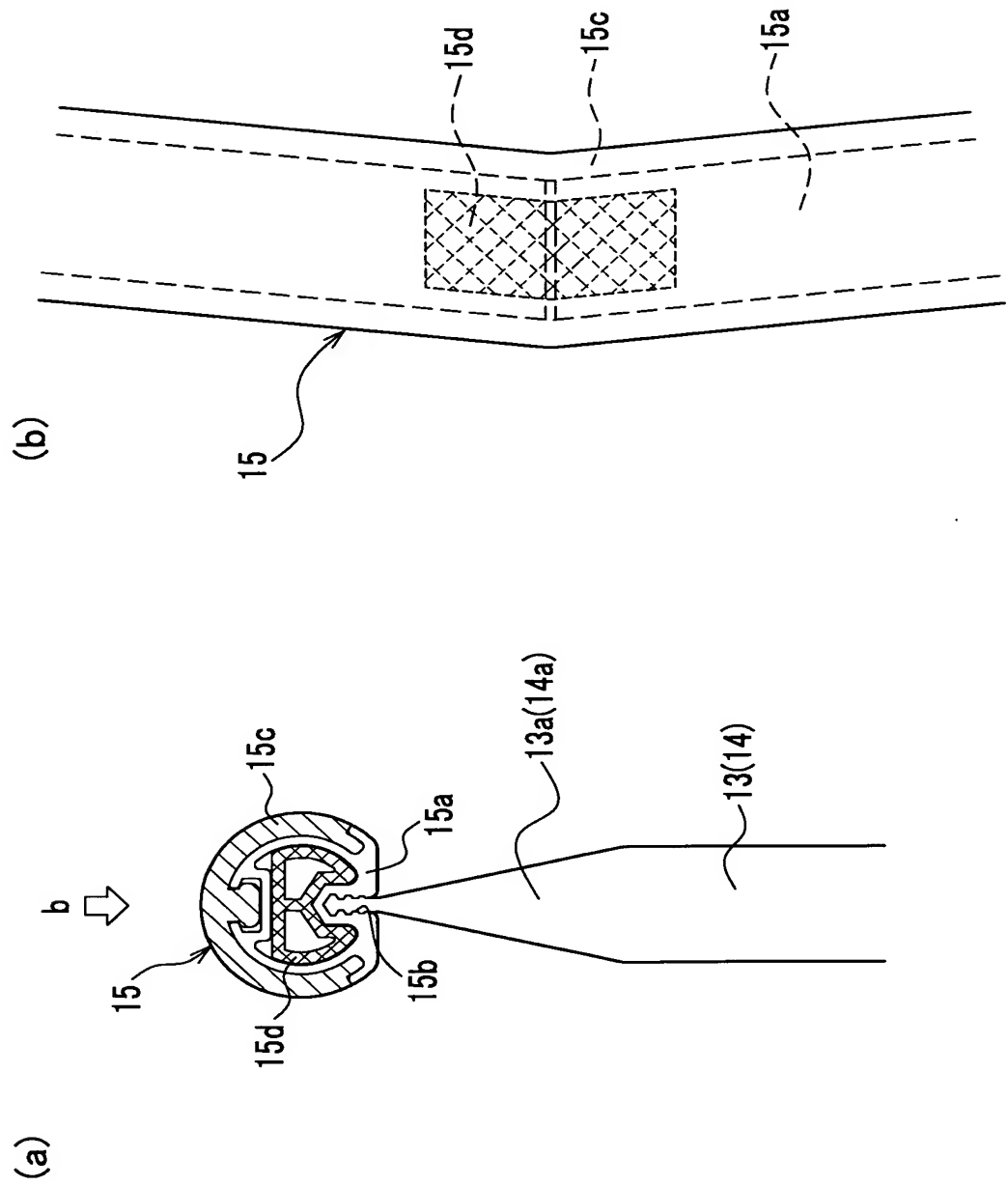


FIG. 14

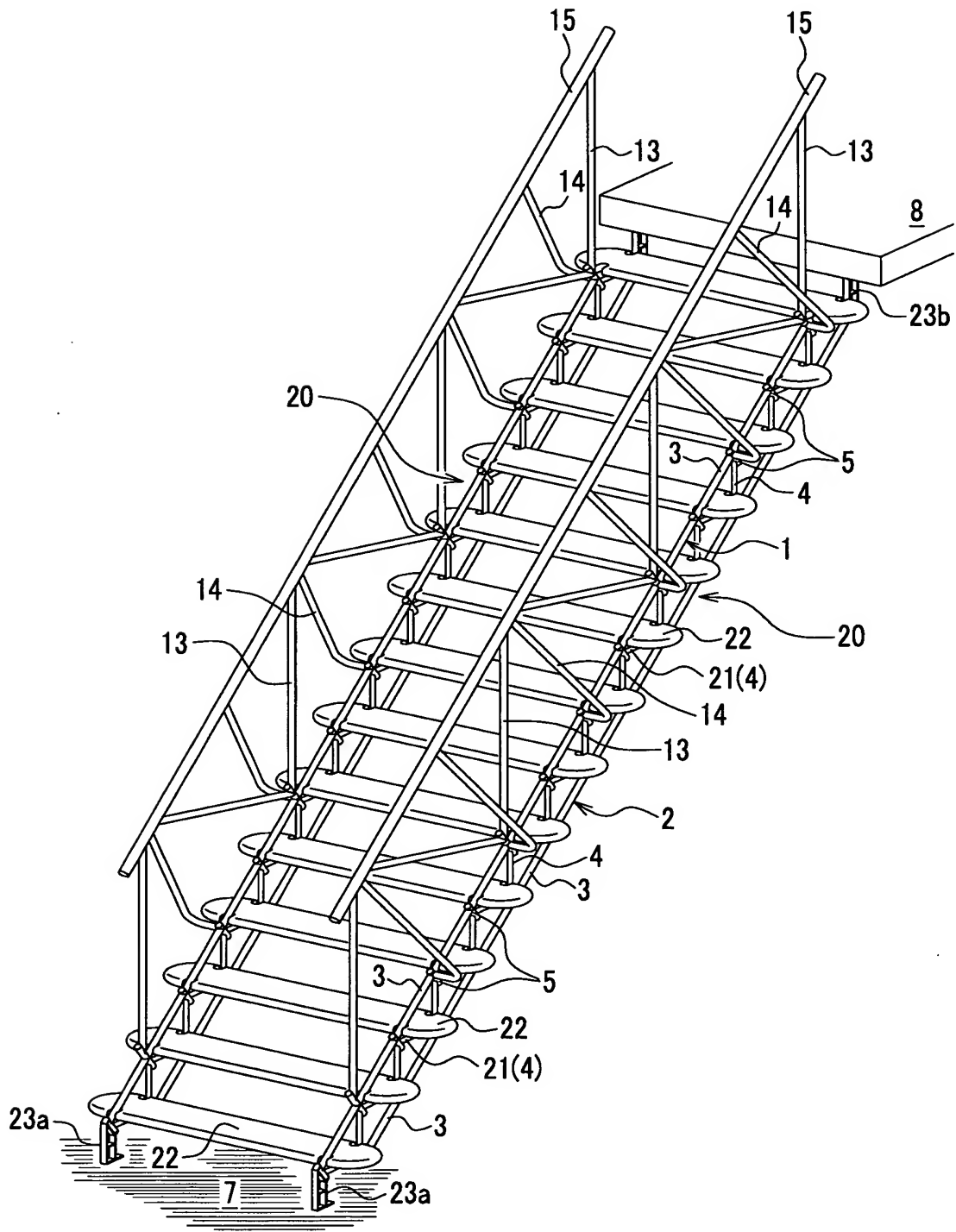


FIG. 15

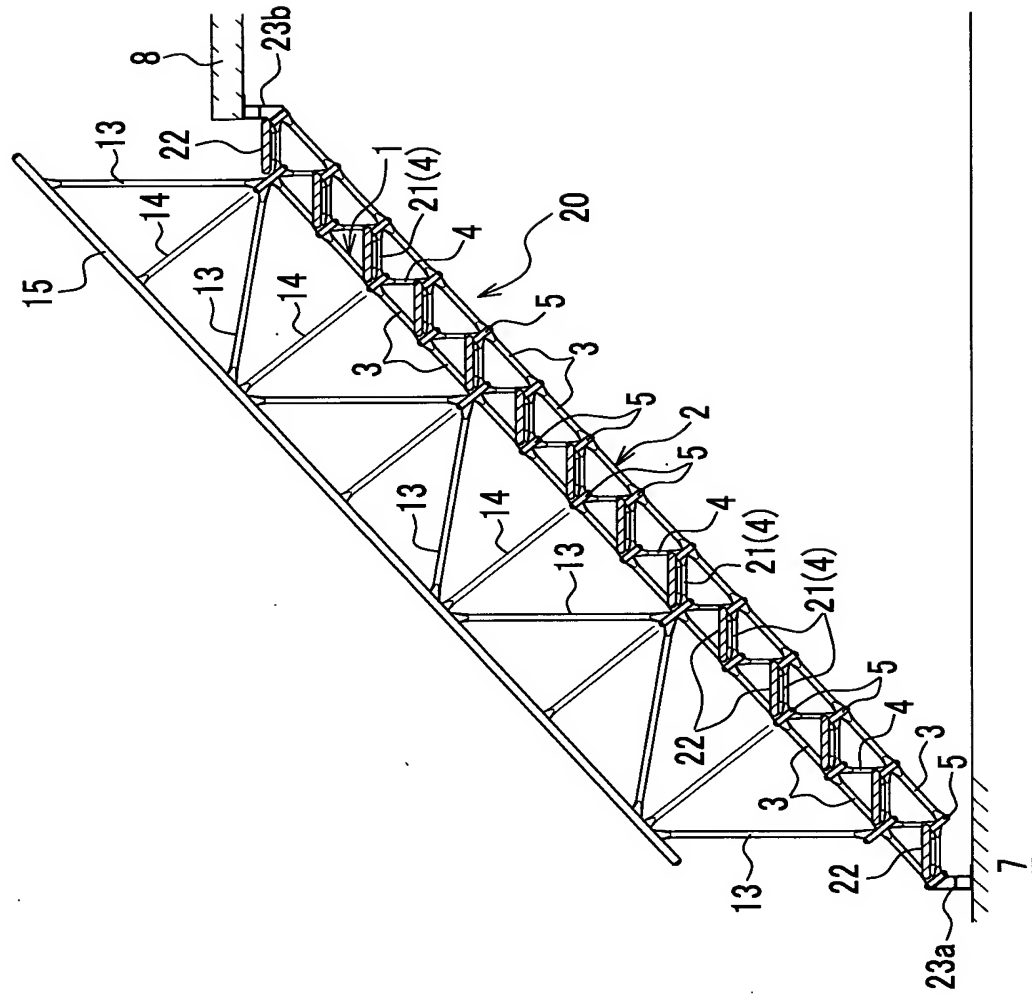
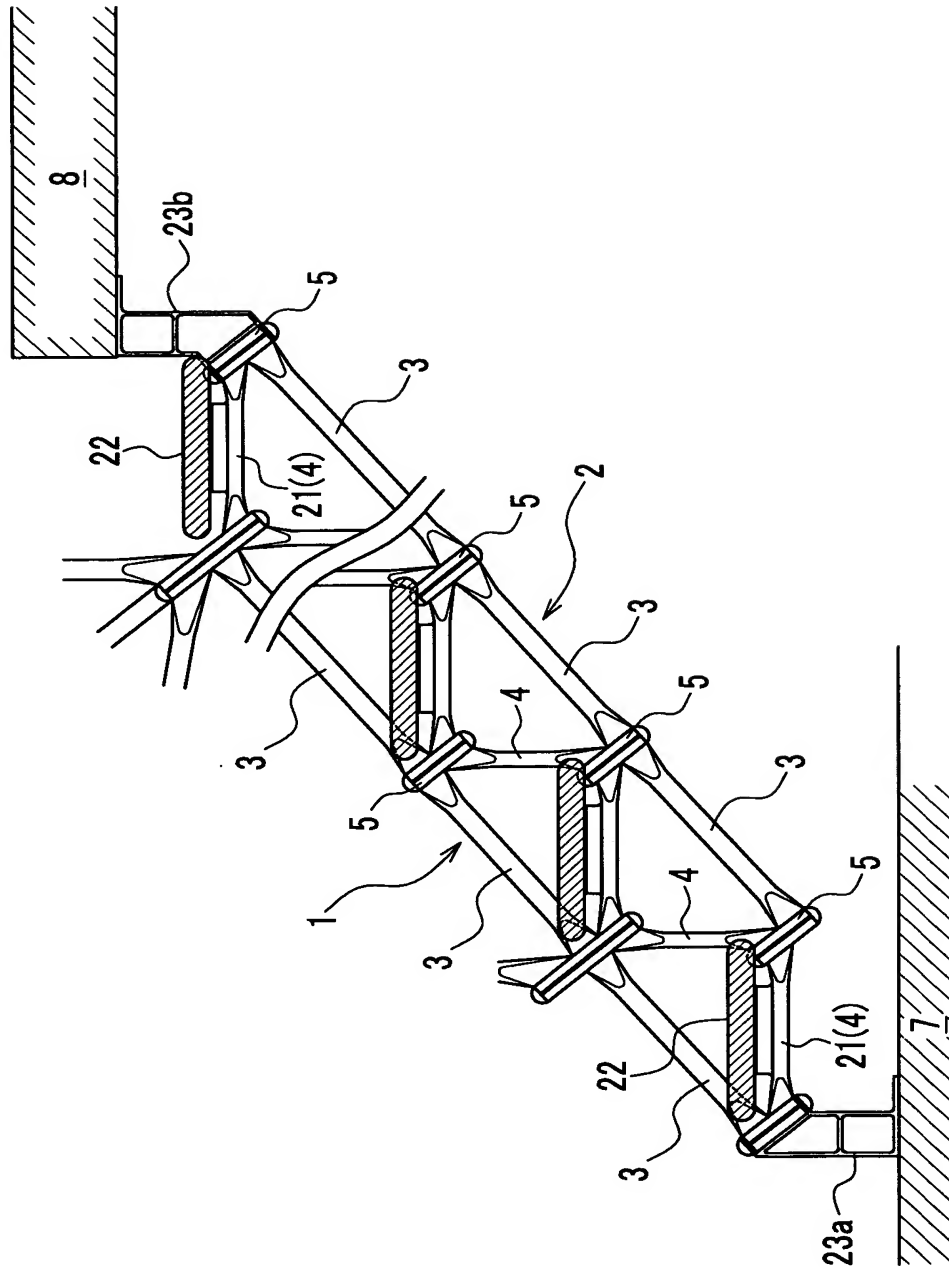


FIG. 16





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FIG. 17

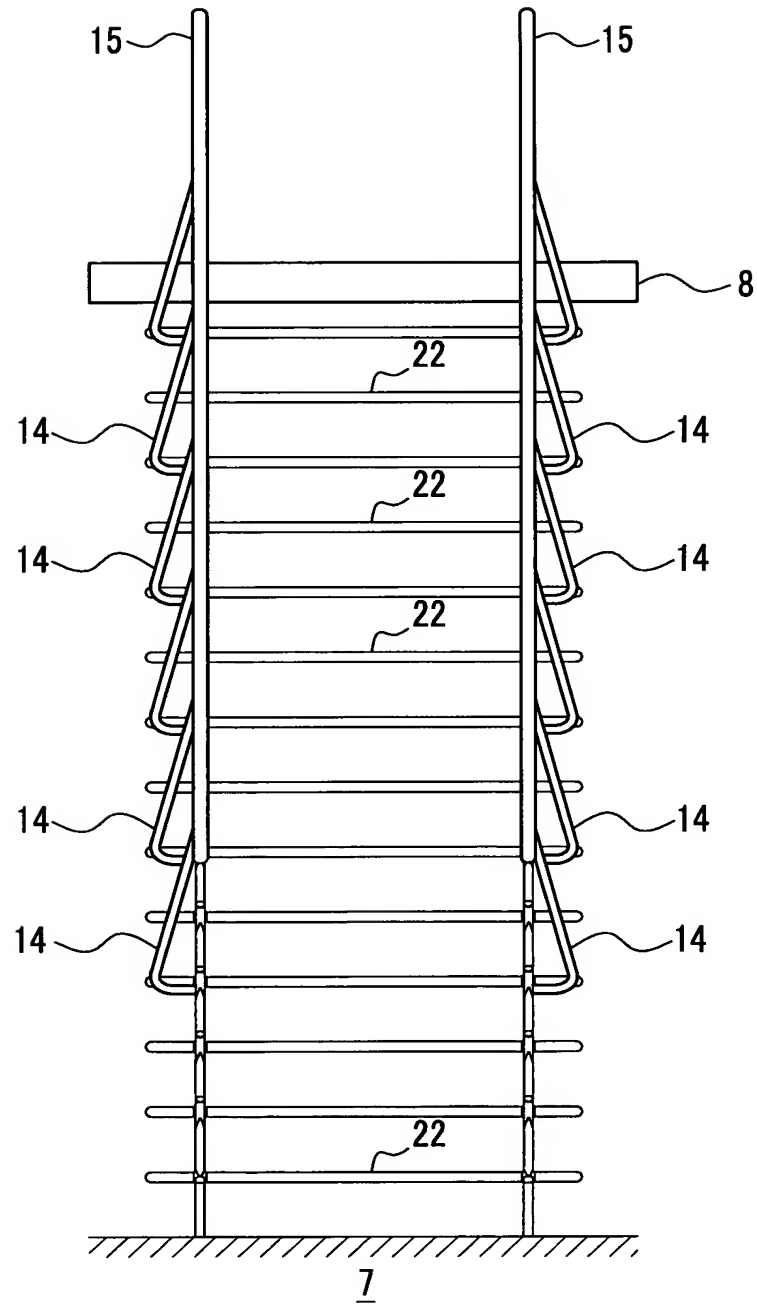
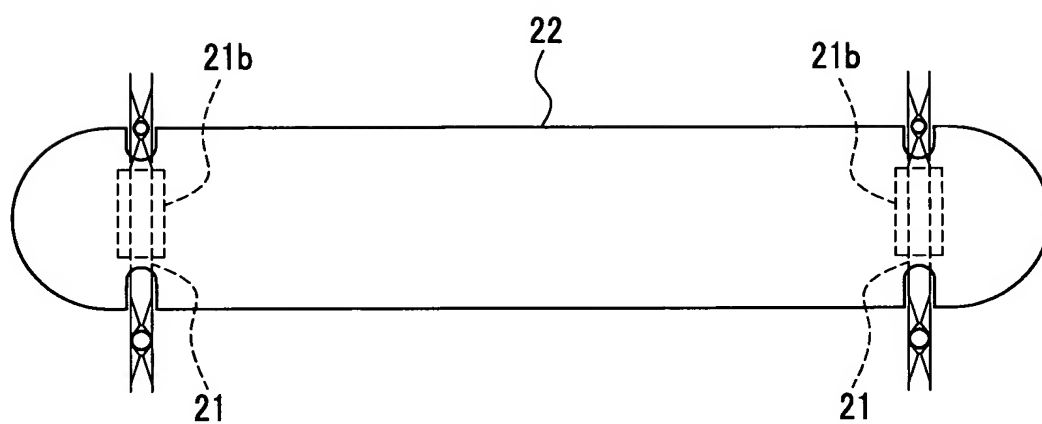


FIG. 18

(a)



(b)

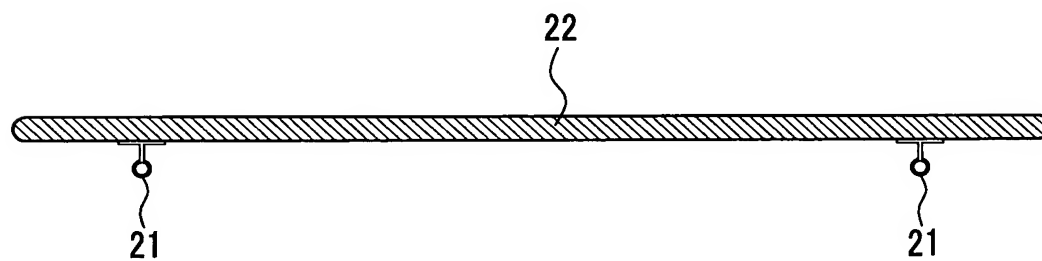


FIG. 19

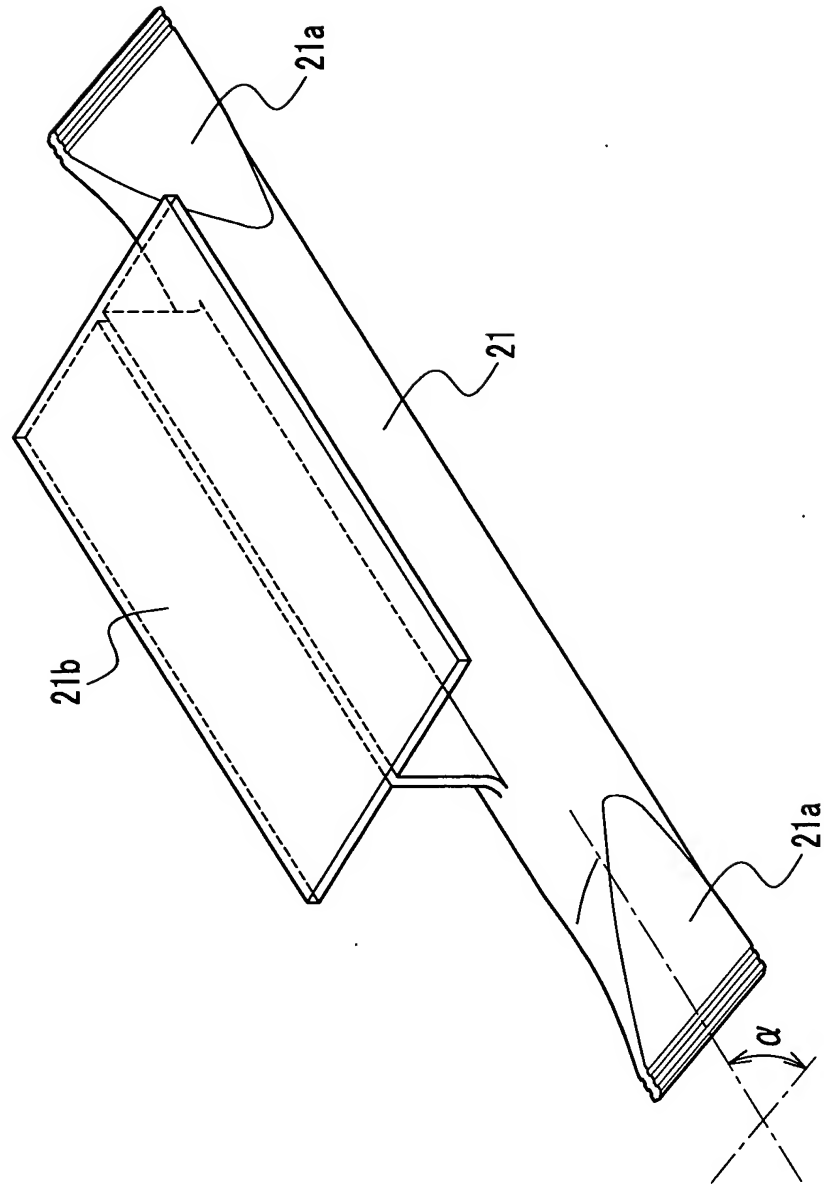


FIG. 20

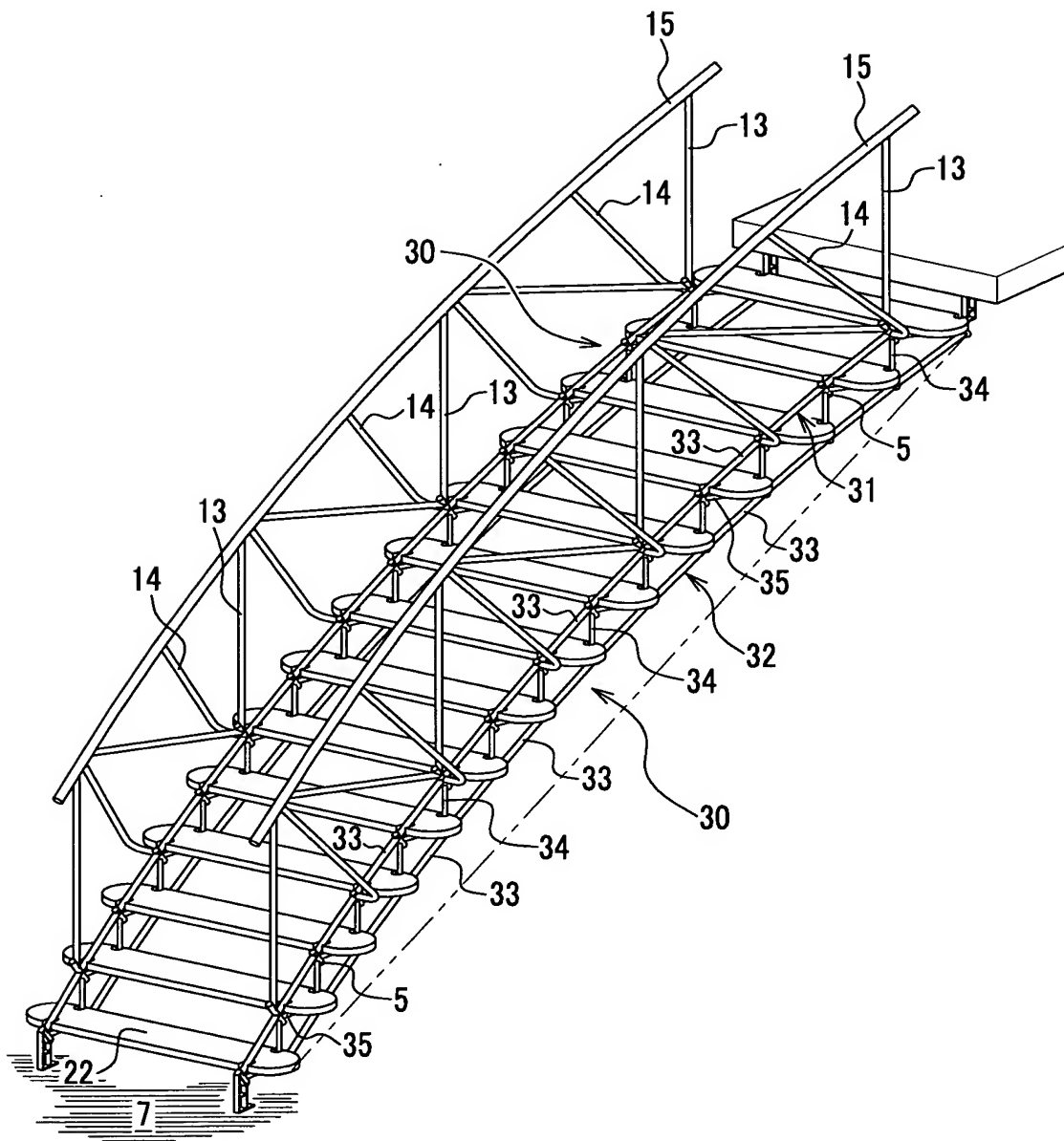
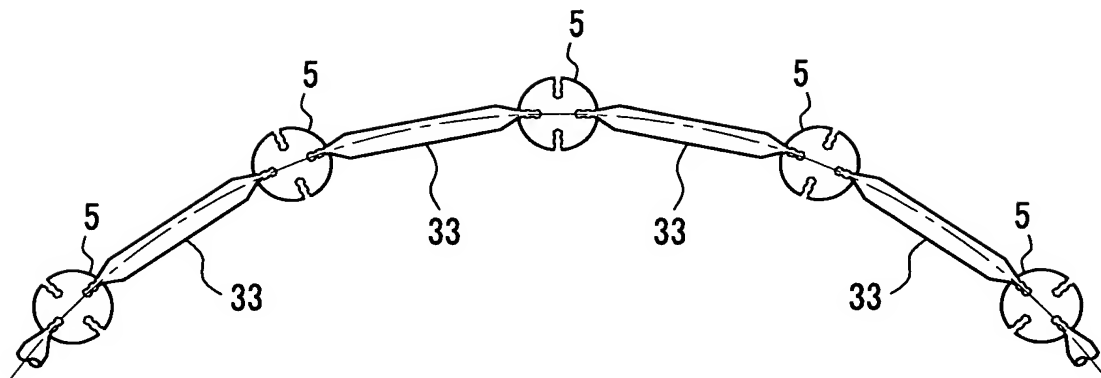


FIG. 21

(a)



(b)

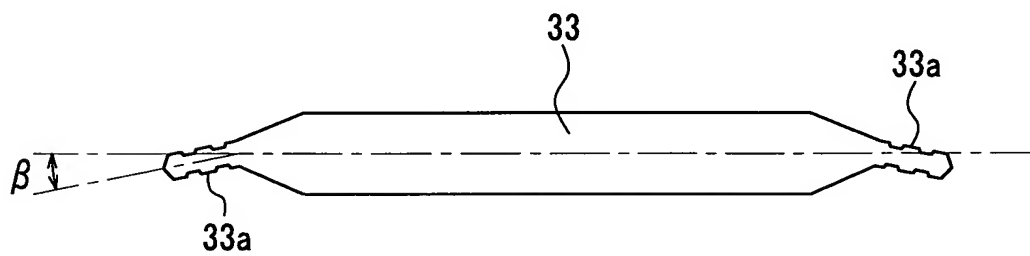


FIG. 22

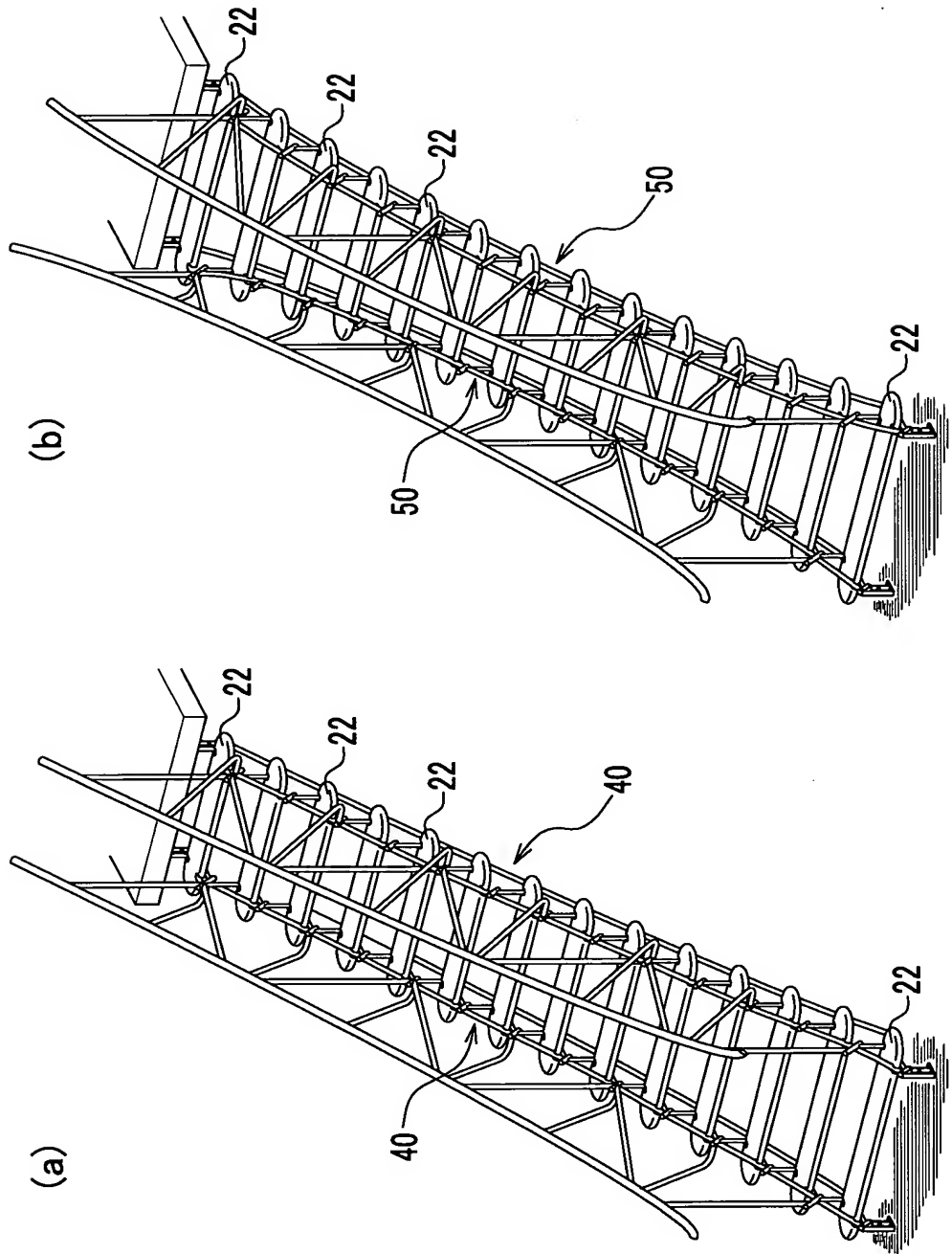


FIG. 23

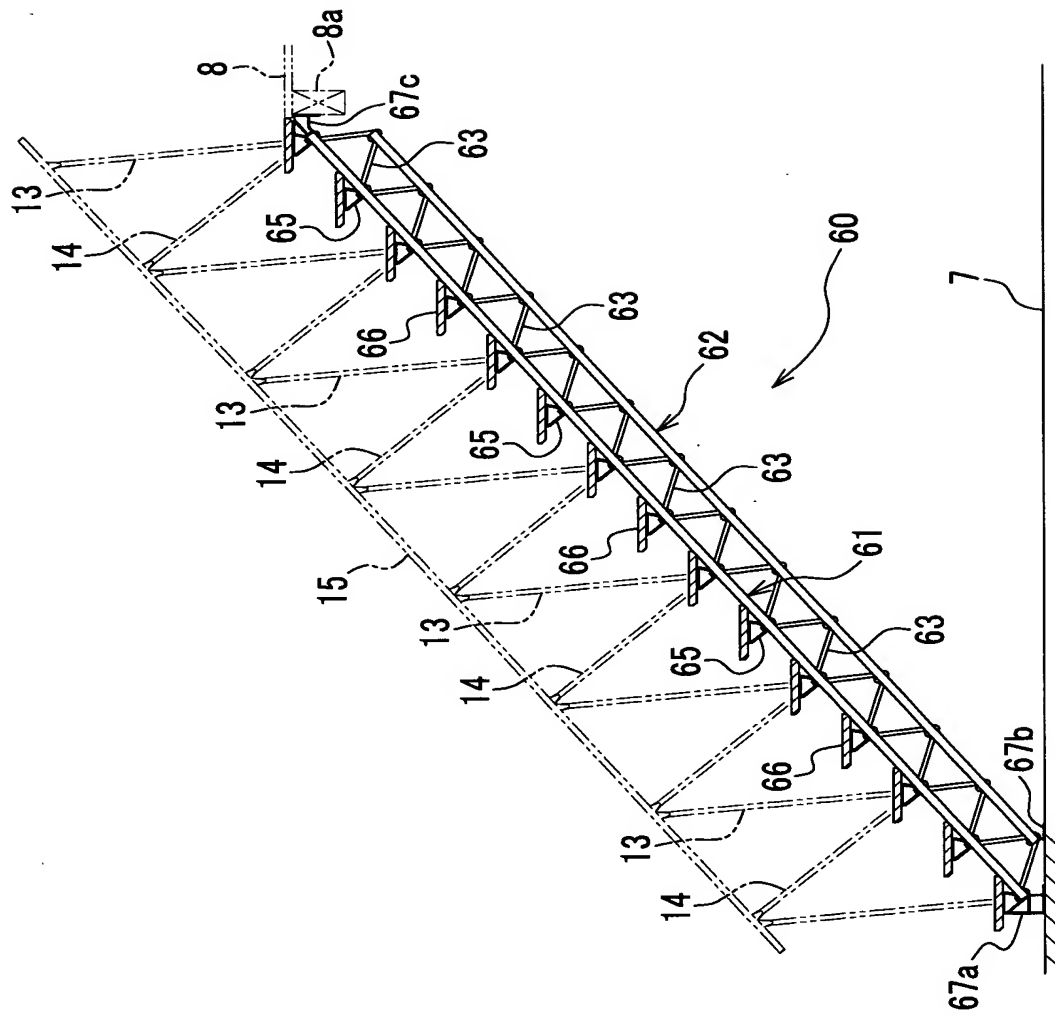
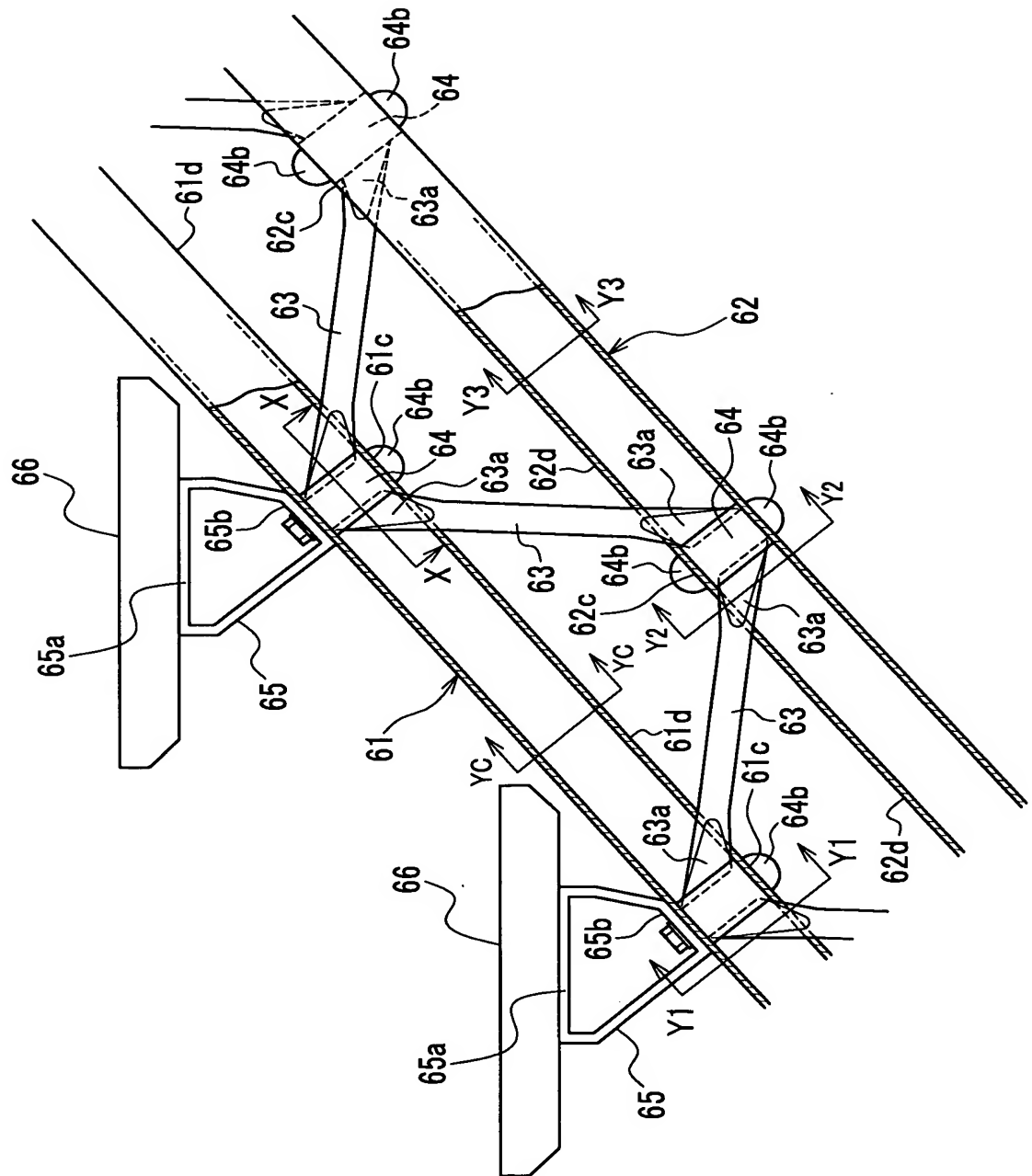


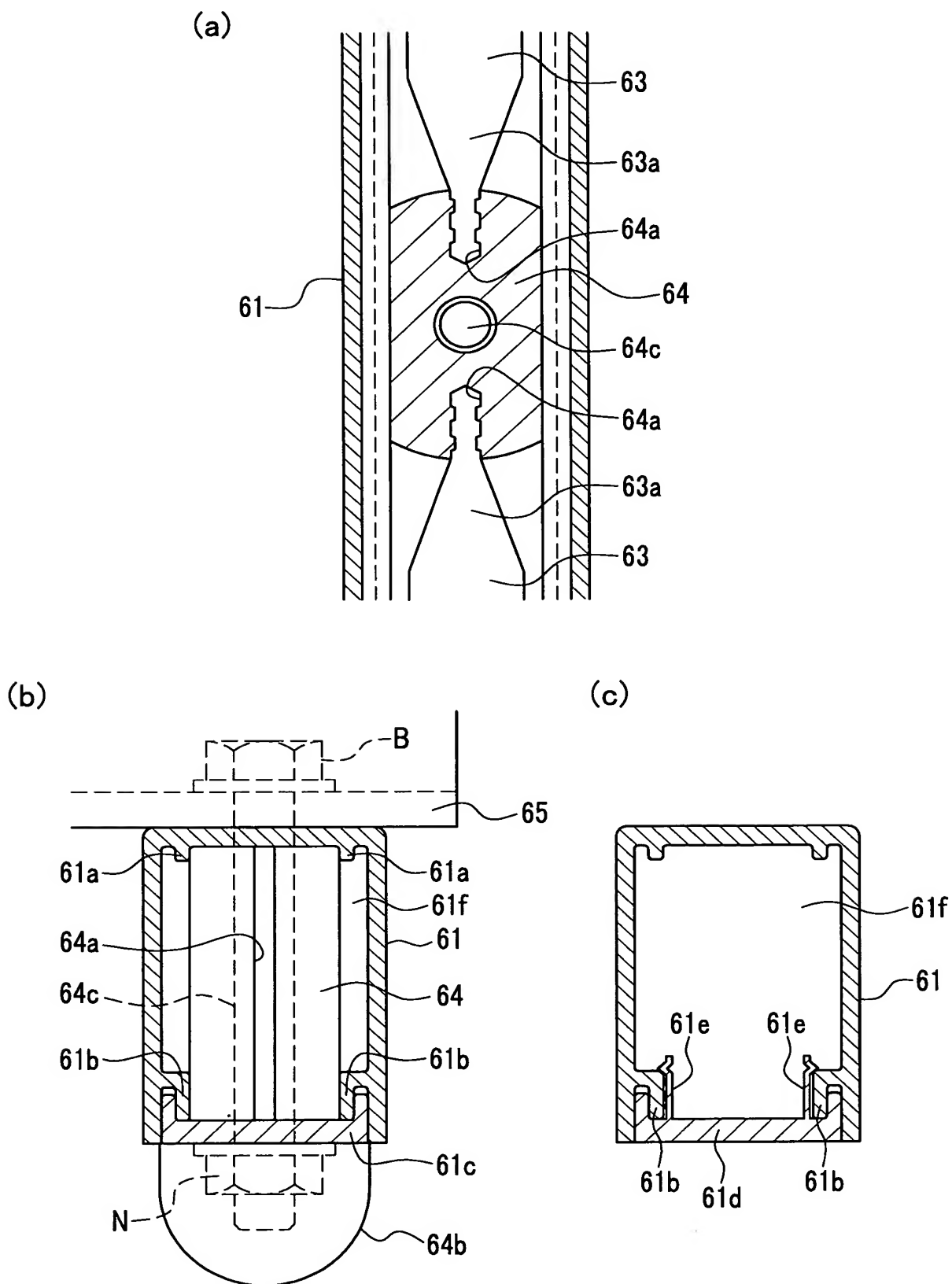
FIG. 24





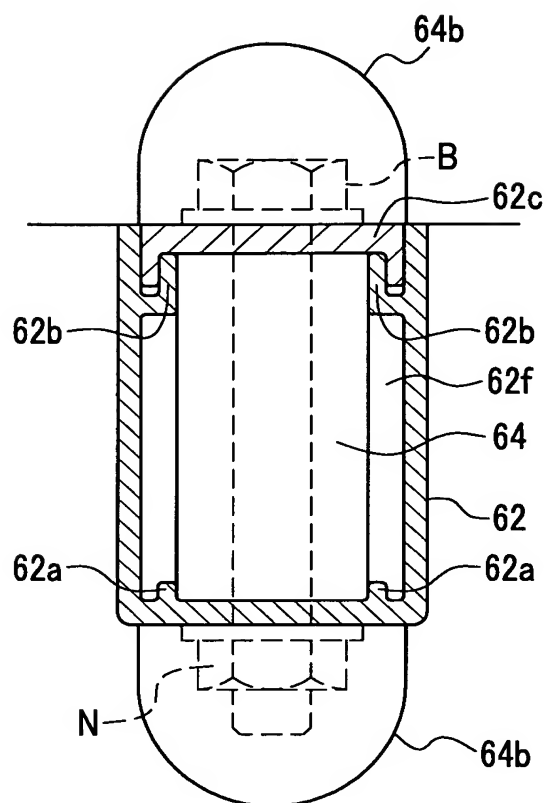
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FIG. 25



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FIG. 26

(a)



(b)

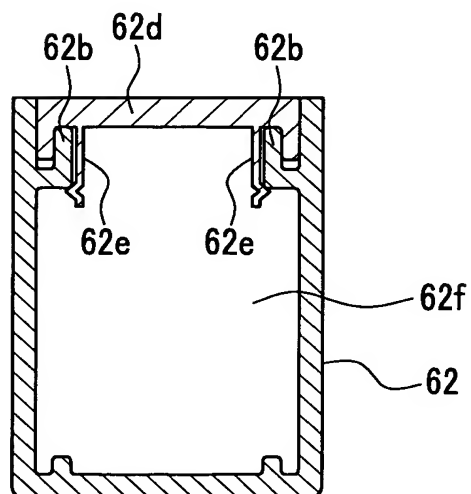
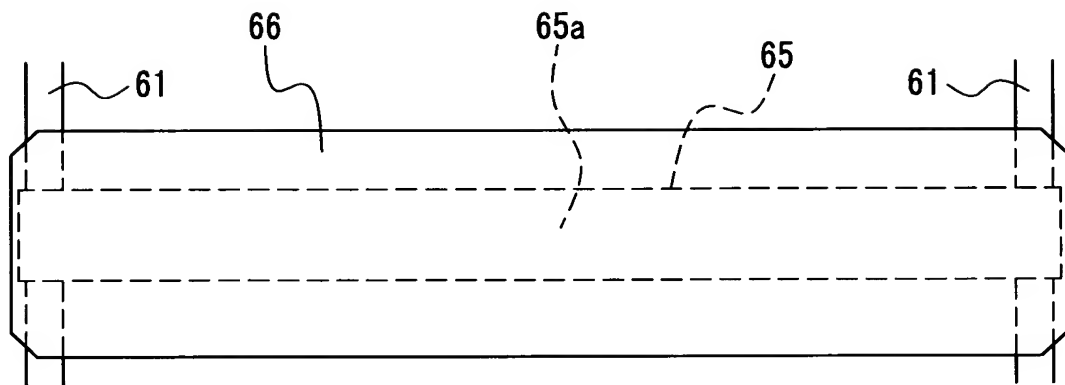
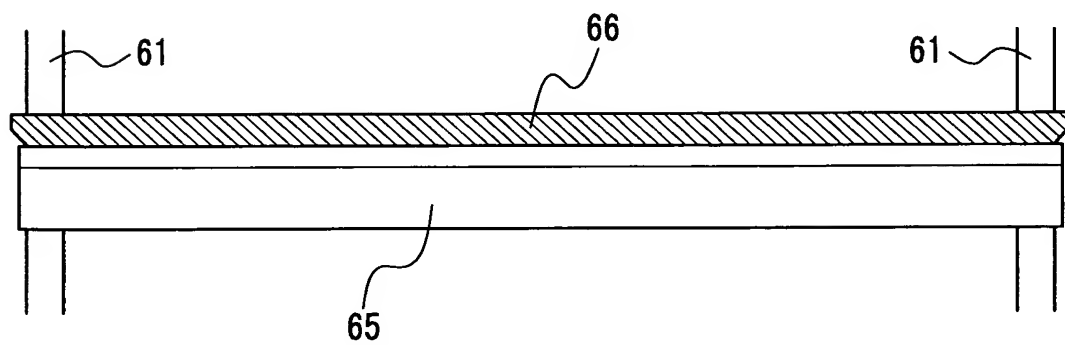


FIG. 27

(a)



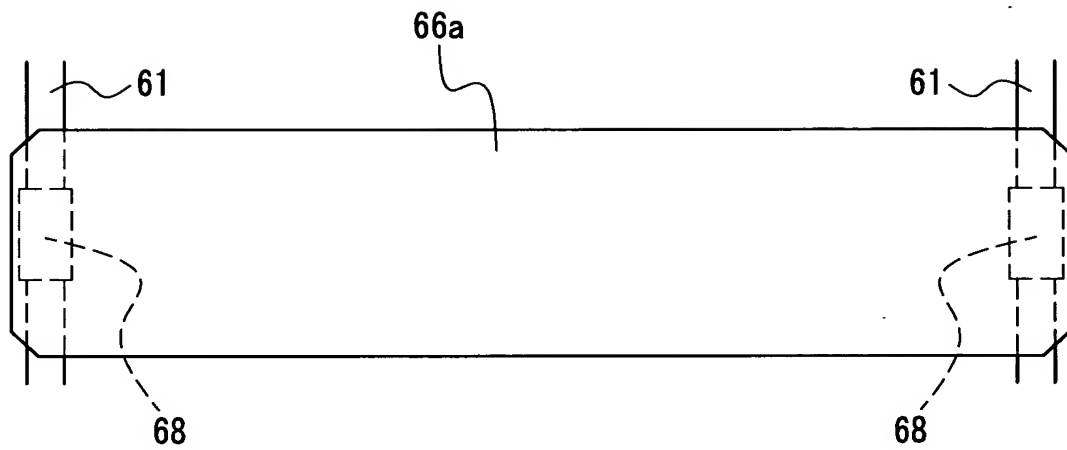
(b)



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FIG. 28

(a)



(b)

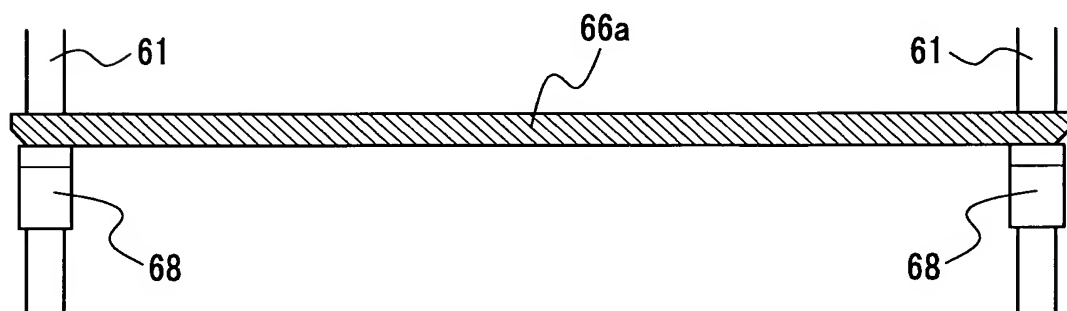
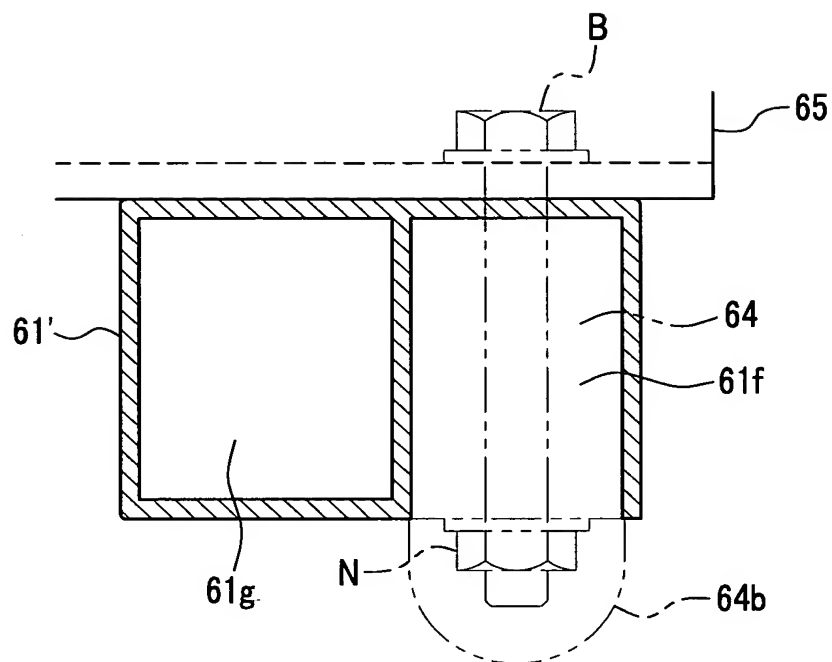
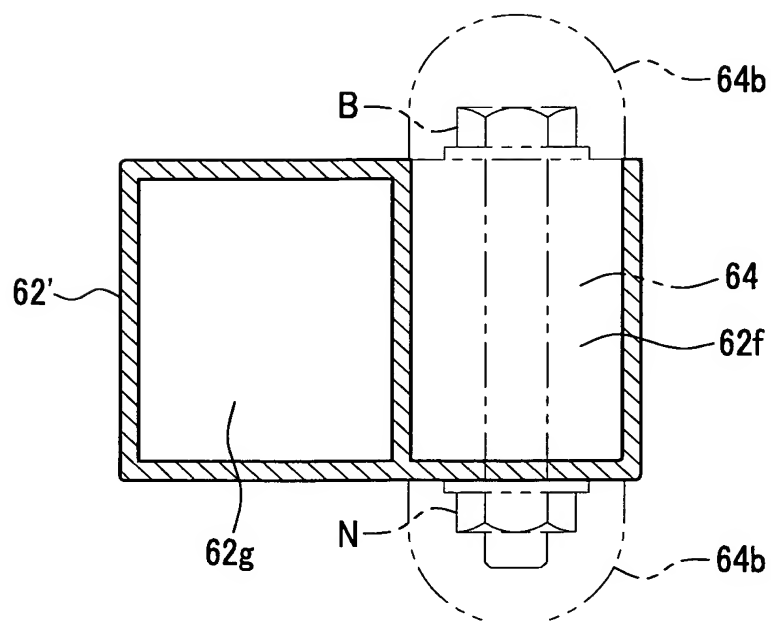


FIG. 29

(a)



(b)



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FIG. 30

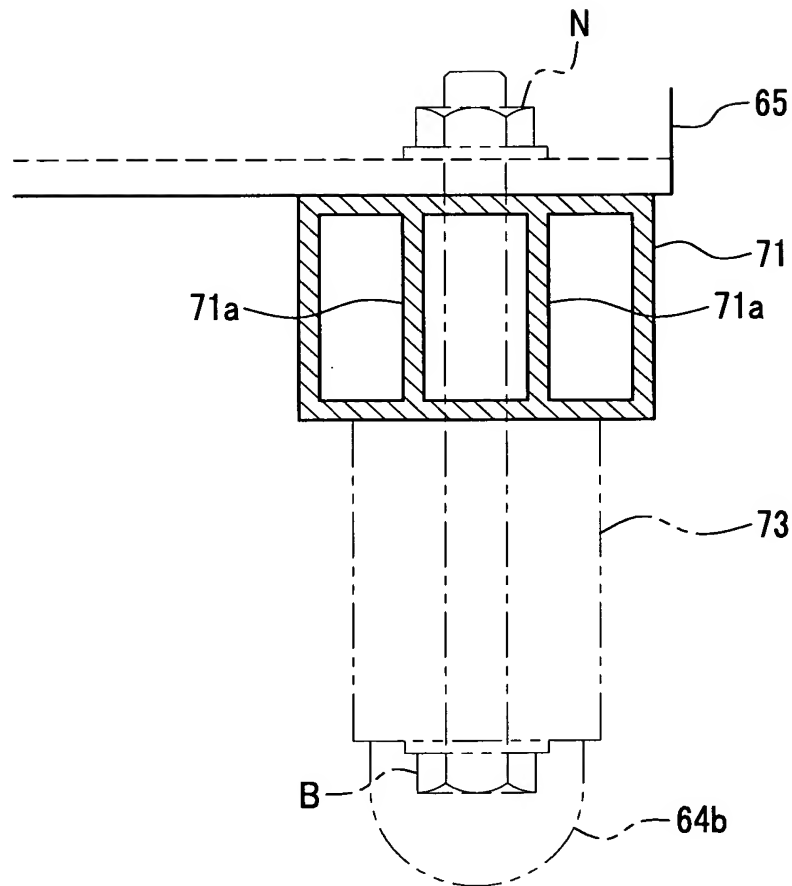


FIG. 31

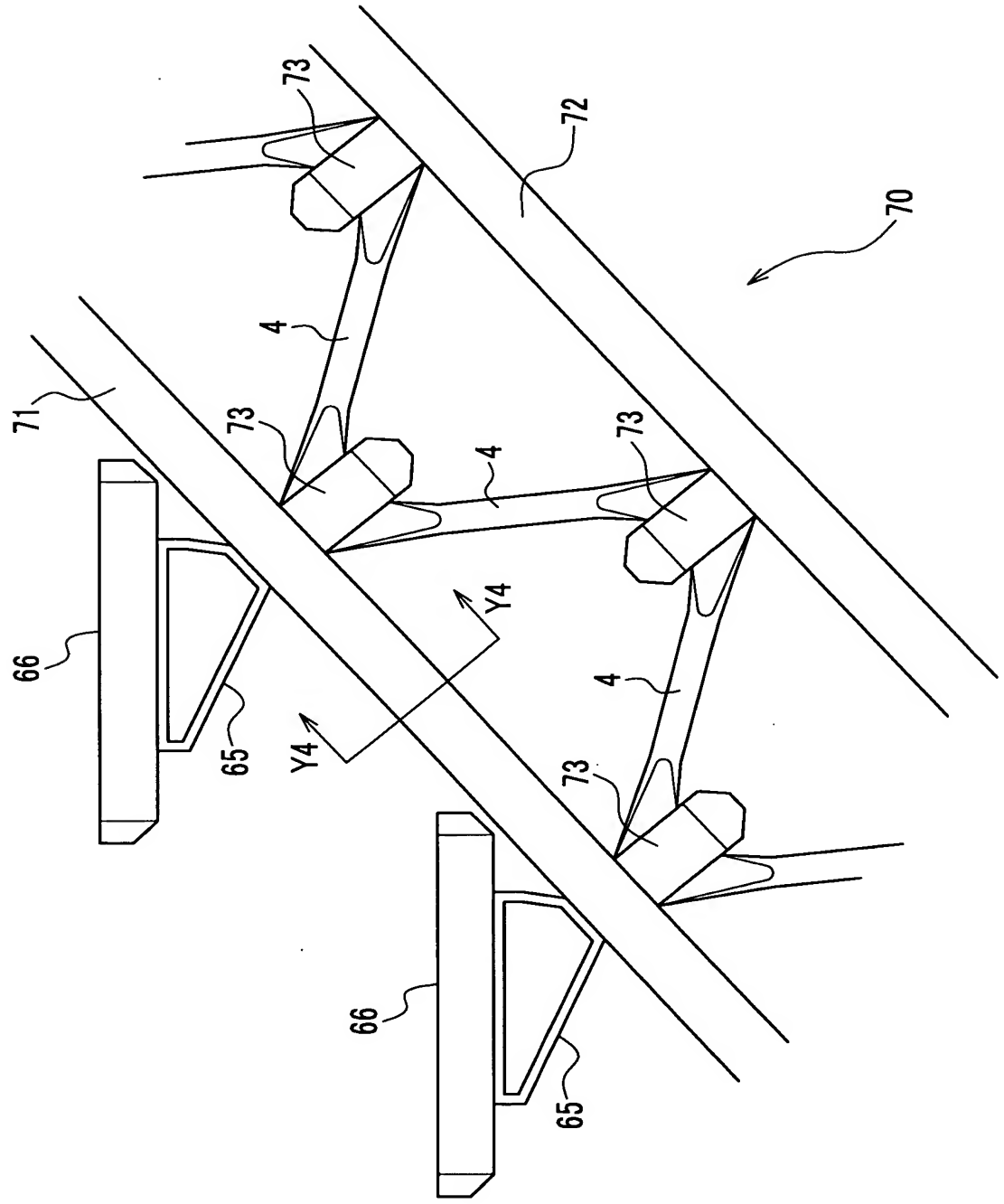


FIG. 32

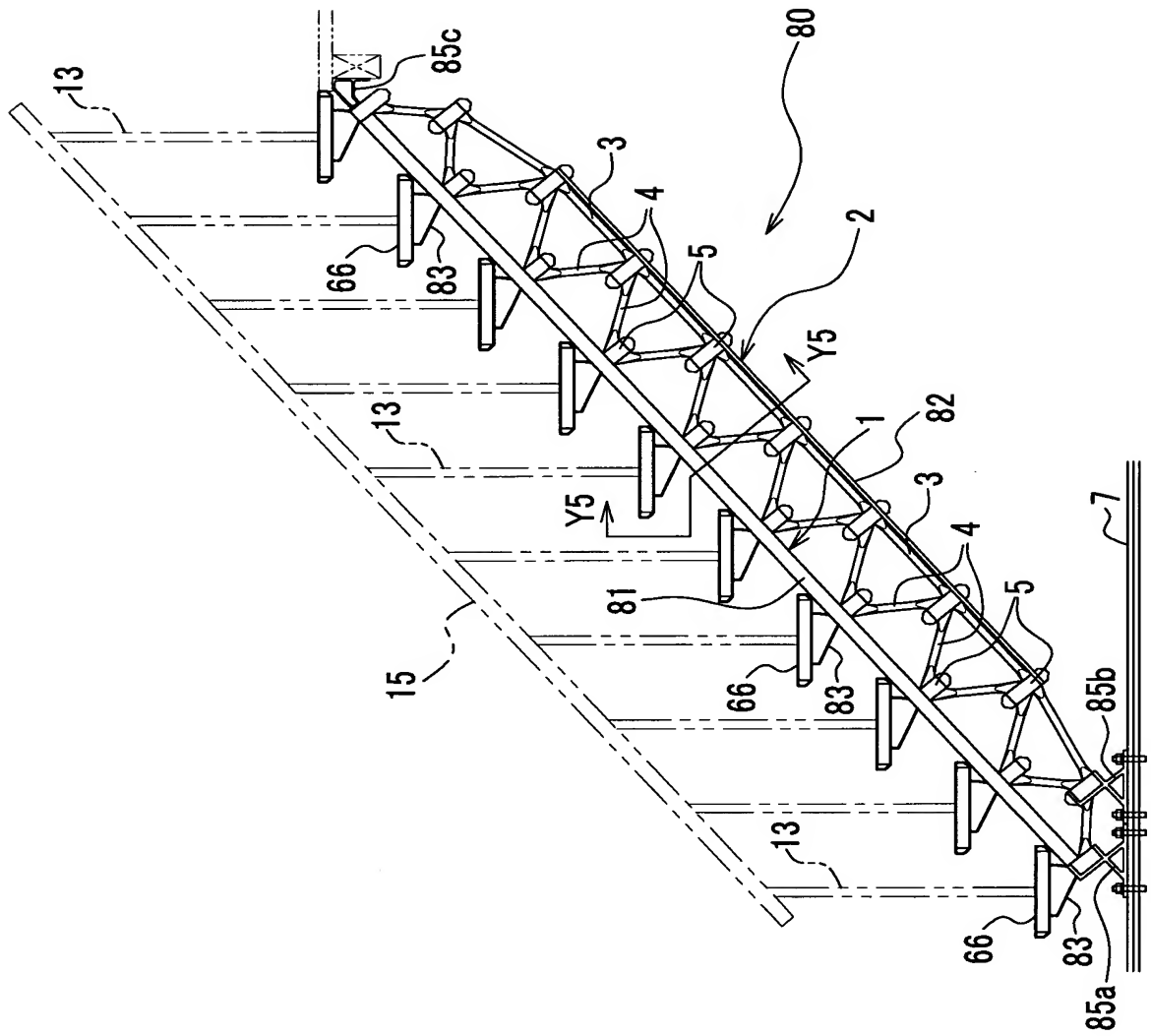
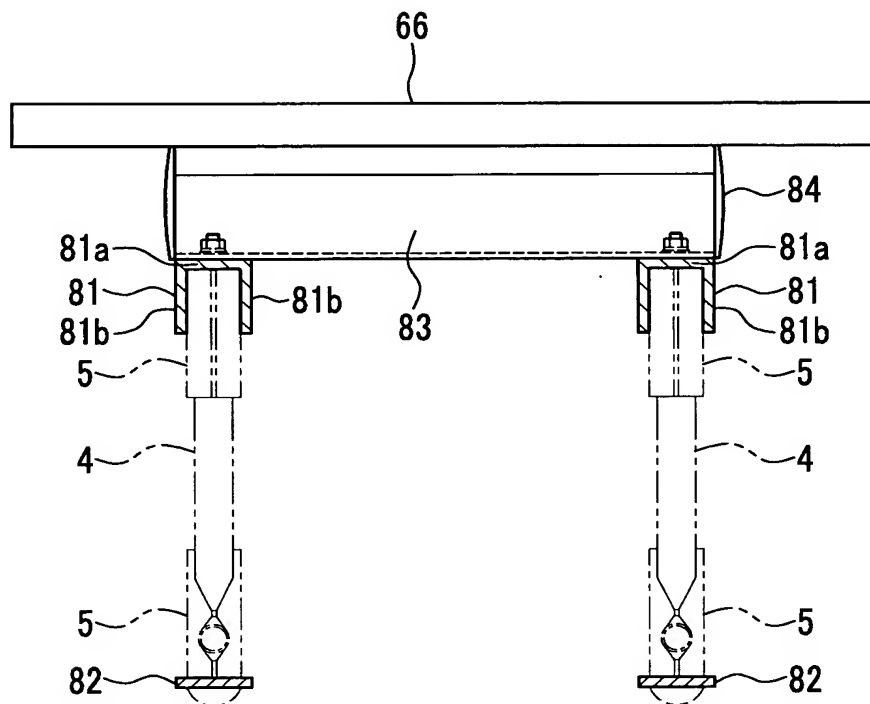




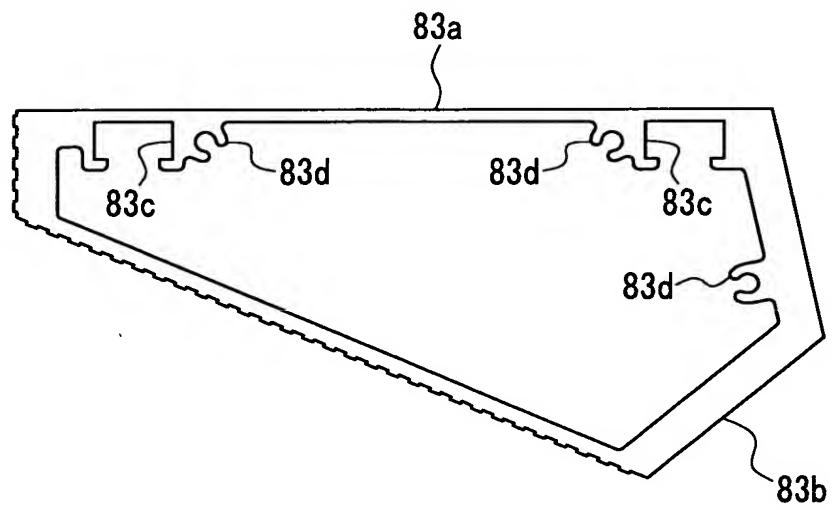


FIG. 34

(a)



(b)



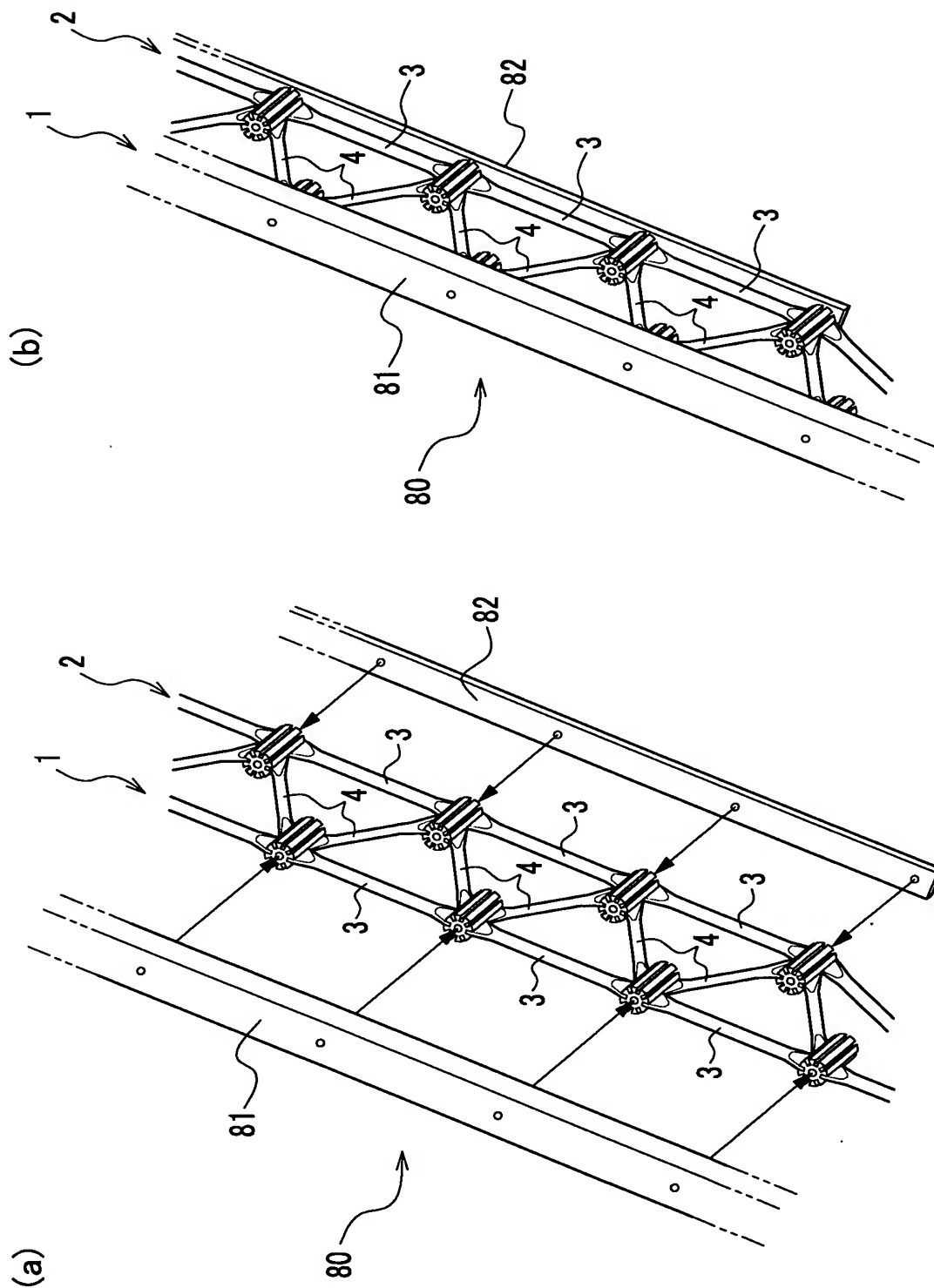


FIG. 36

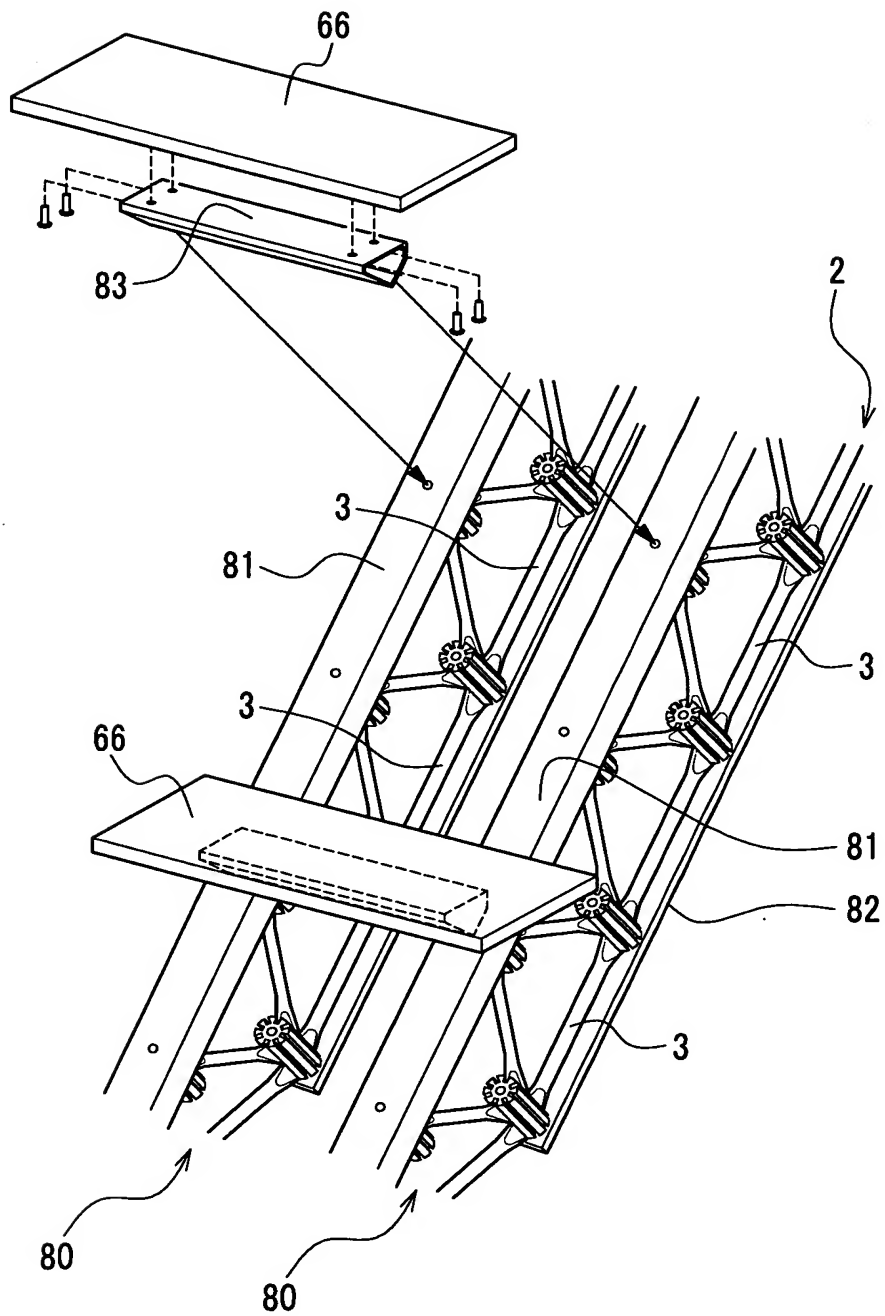
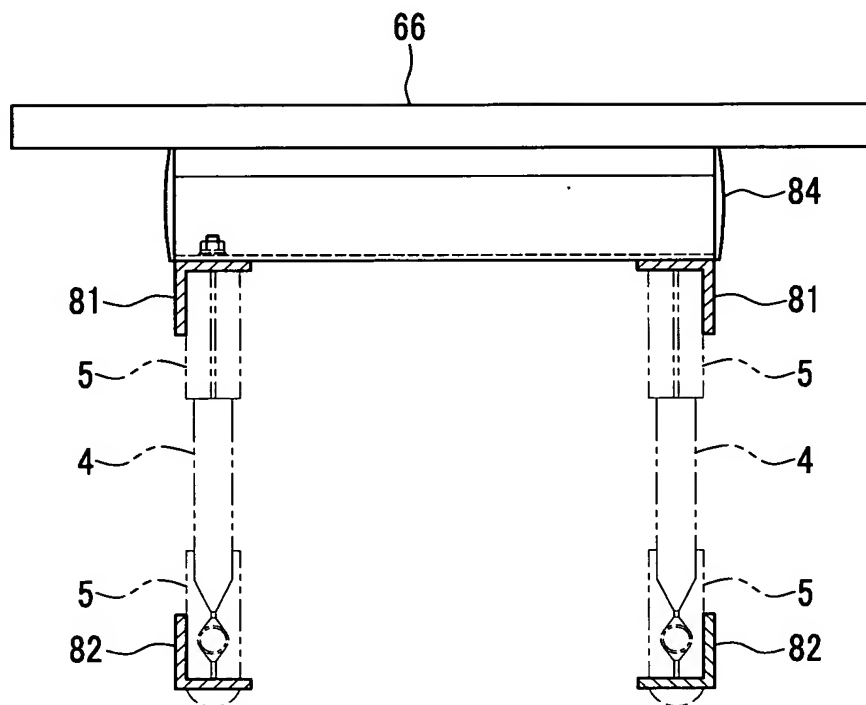


FIG. 37

(a)



(b)

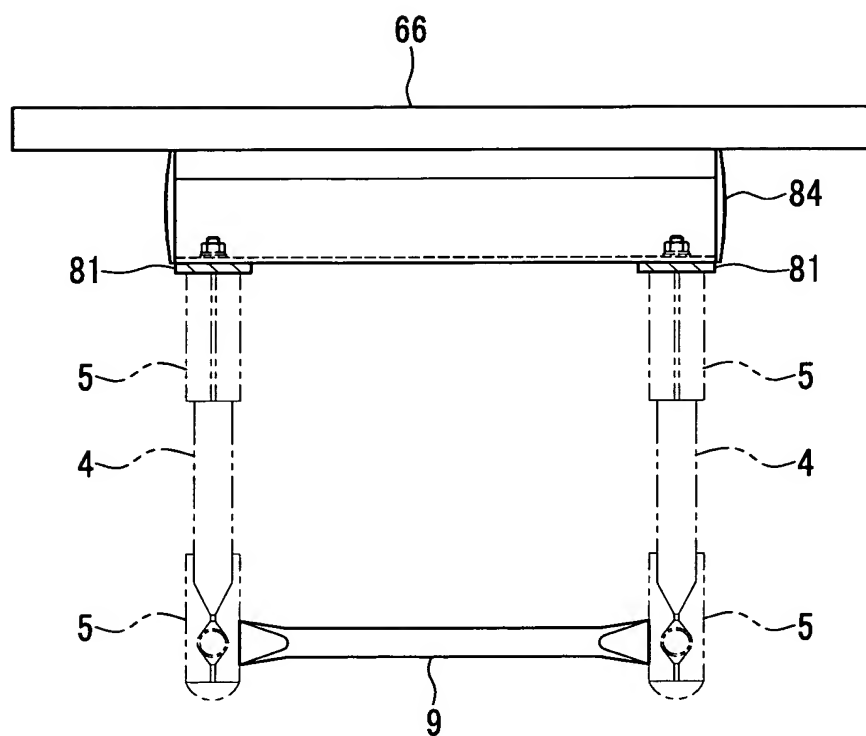


FIG. 38

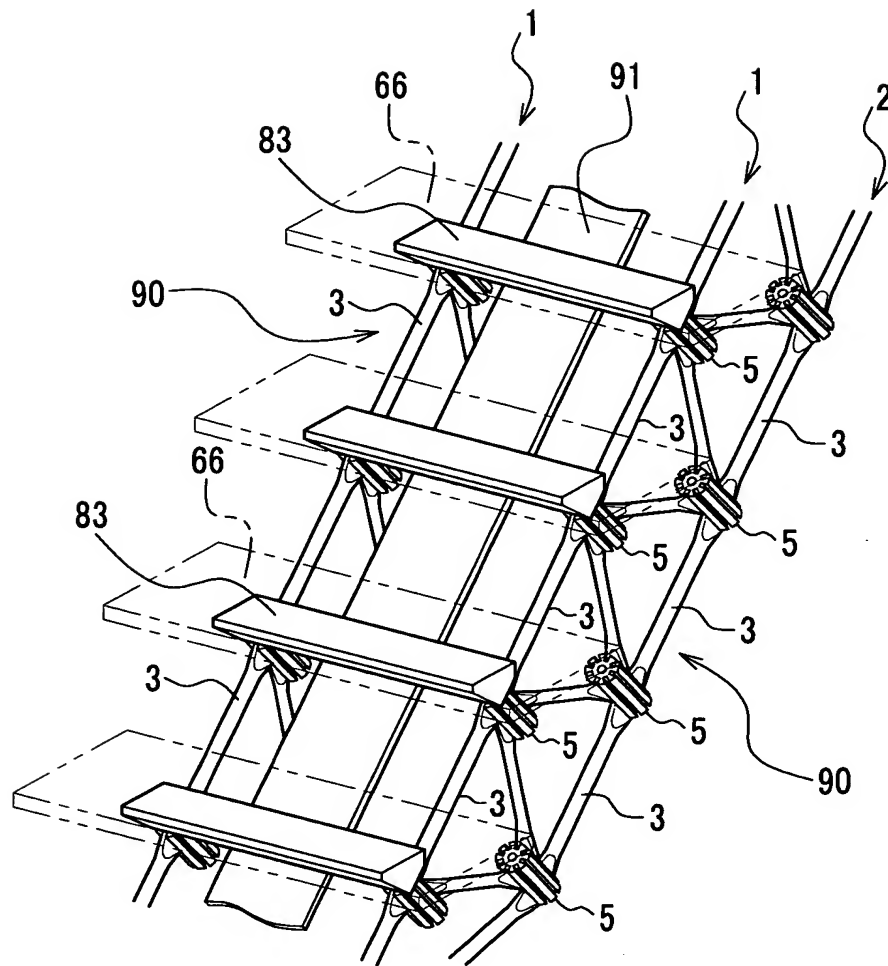


FIG. 39

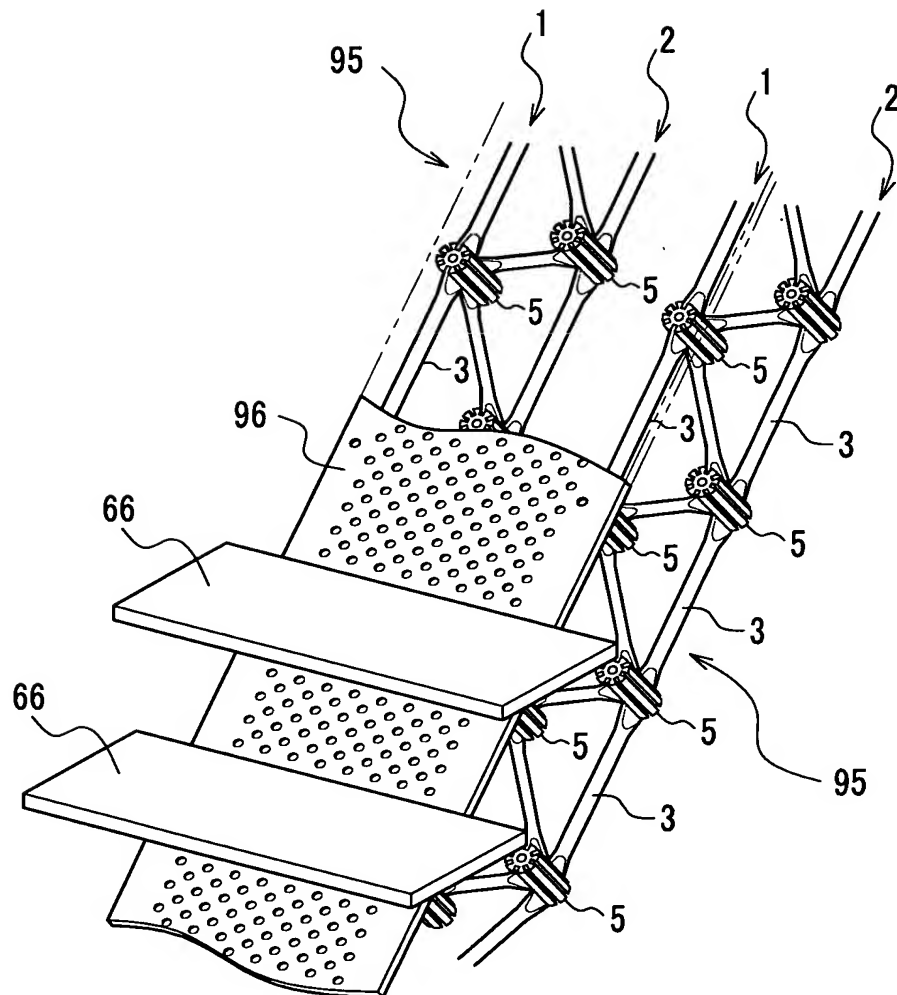


FIG. 40

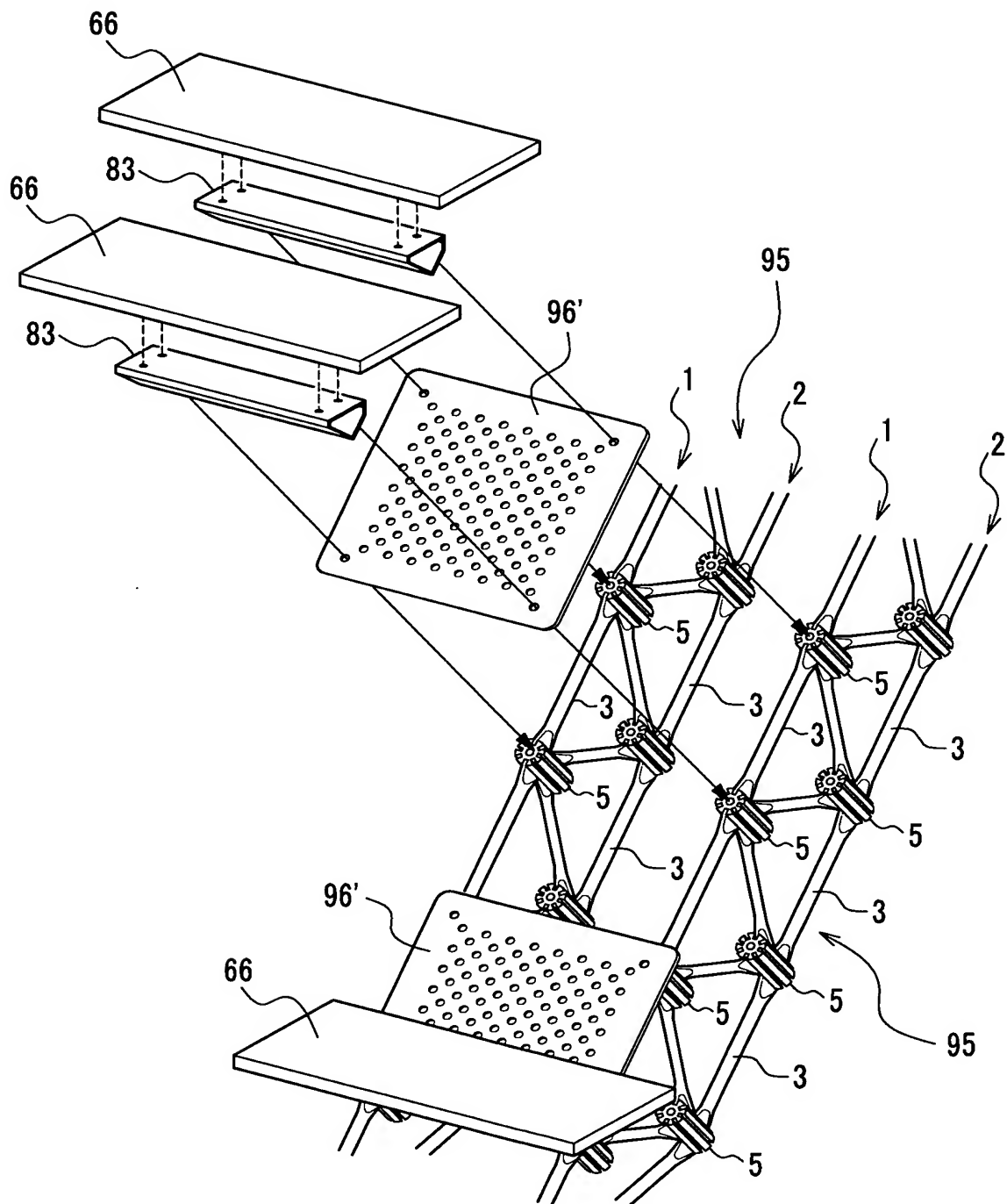






FIG. 42

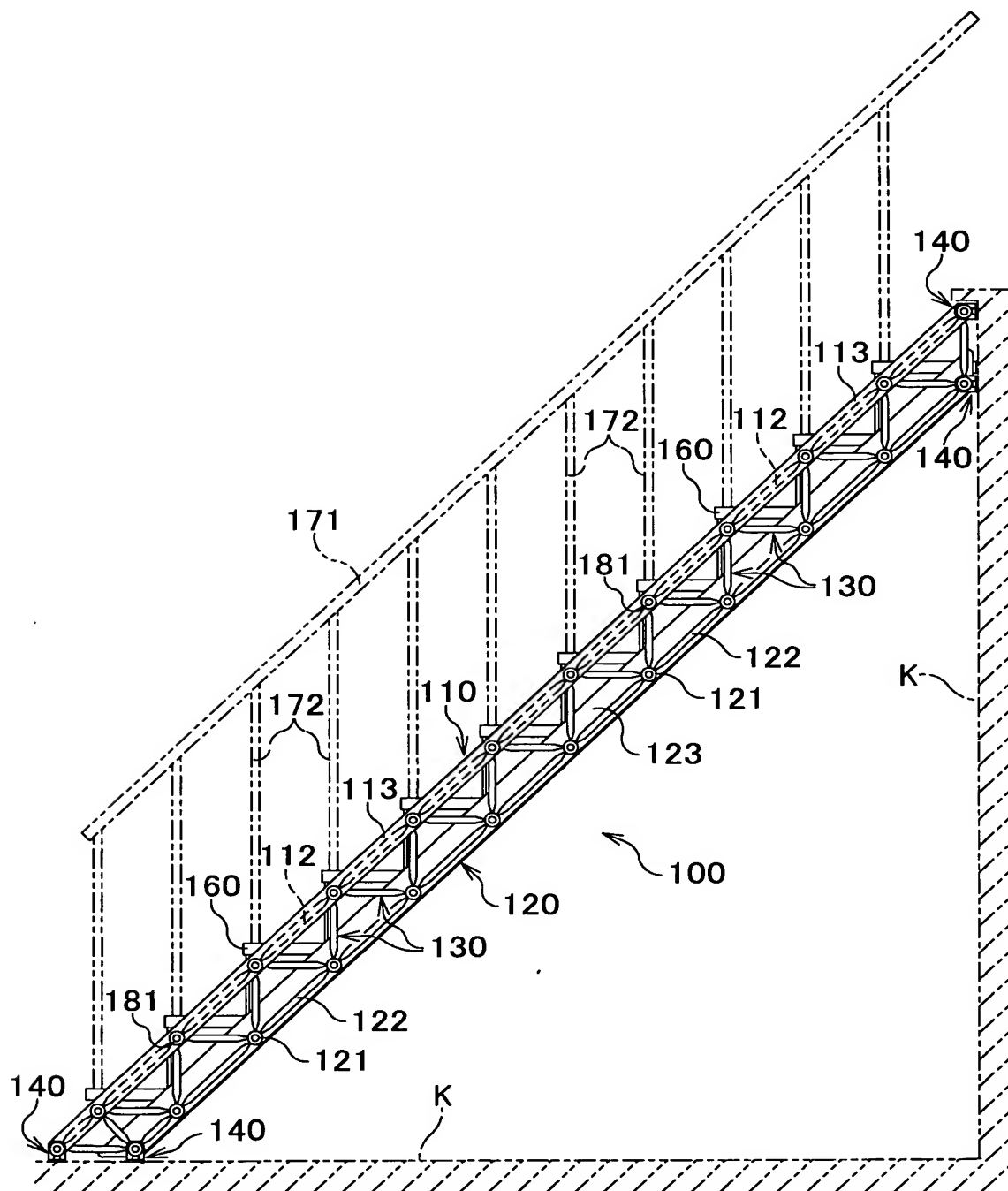


FIG. 43

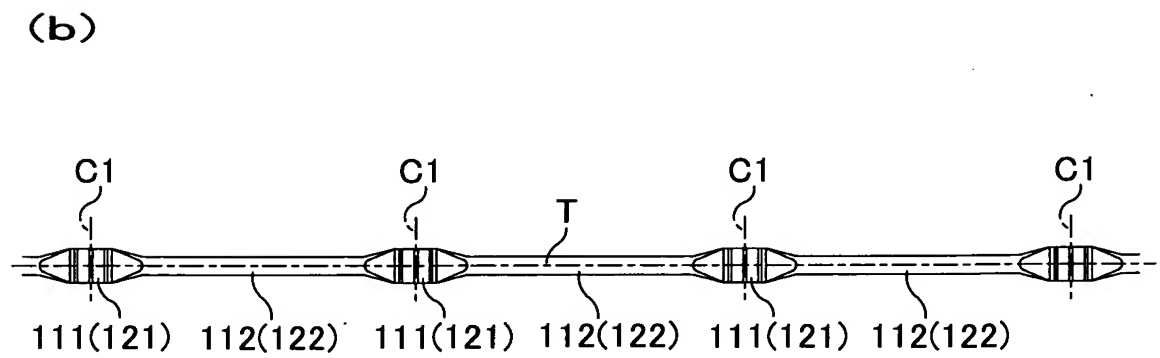
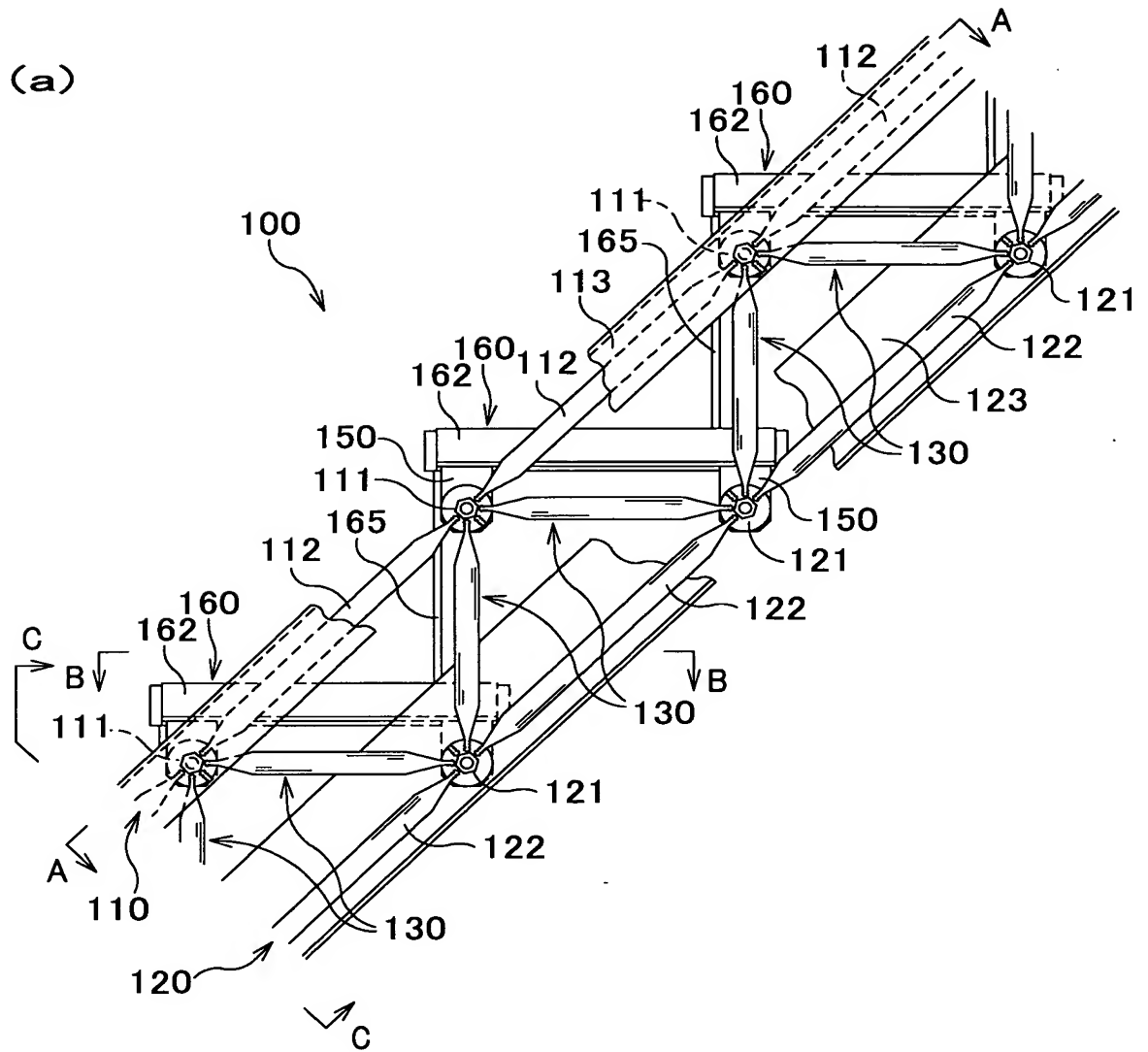
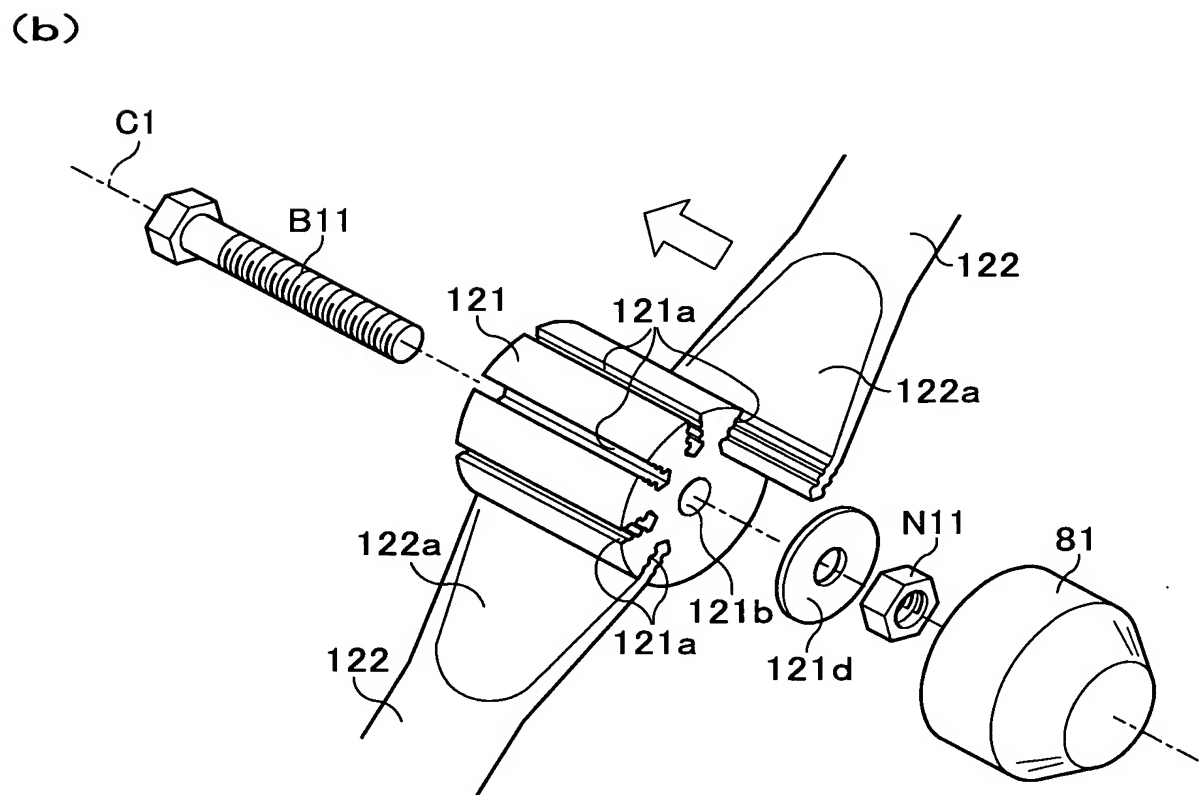
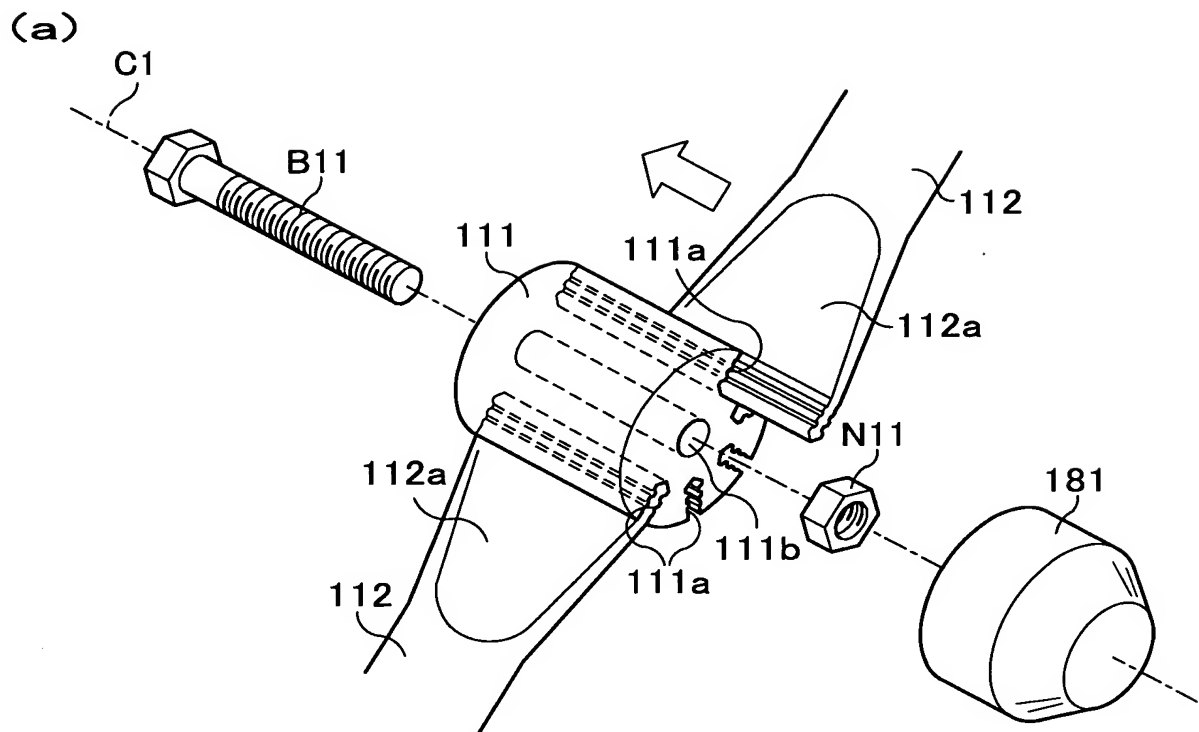


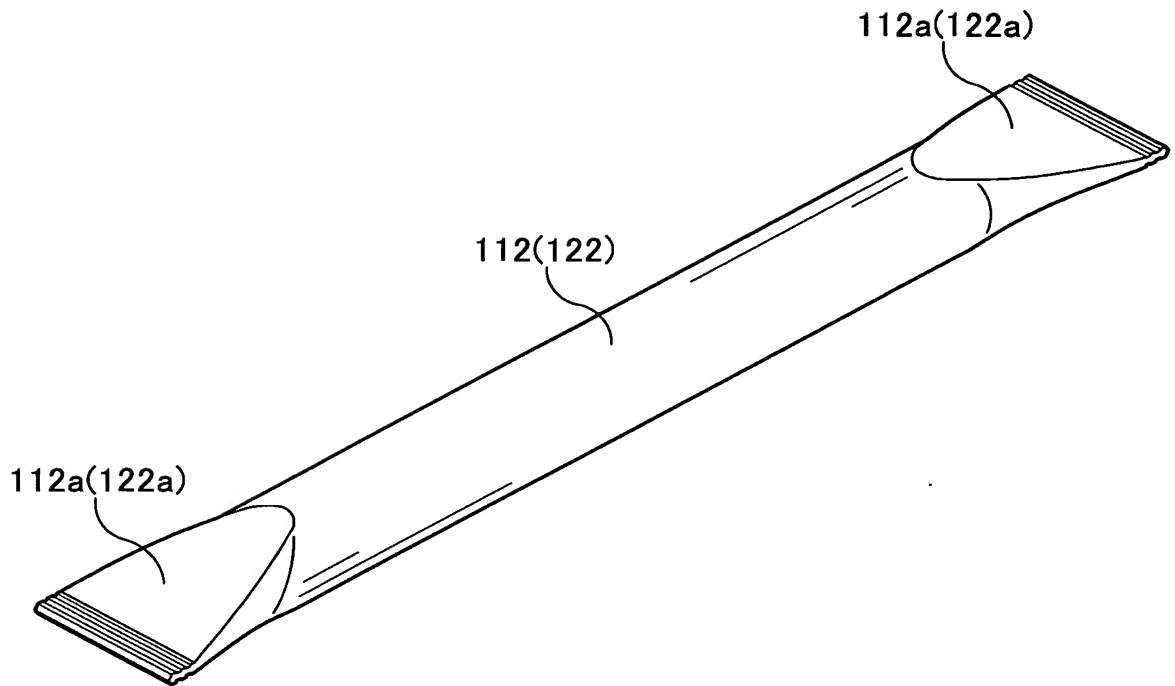
FIG. 44



A cross-sectional view of a semiconductor device. A central circular region 111 is filled with diagonal hatching. It contains a smaller circular void 111b. Four interdigitated structures 111a are located at the corners of the central region. Six lines radiate from the central region: two horizontal lines 112, two diagonal lines 130, and two vertical lines 111f. The horizontal lines 112 have segments 112a. The diagonal lines 130 have segments 130a. The vertical lines 111f have a segment 111f.

FIG. 46

(a)



(b)

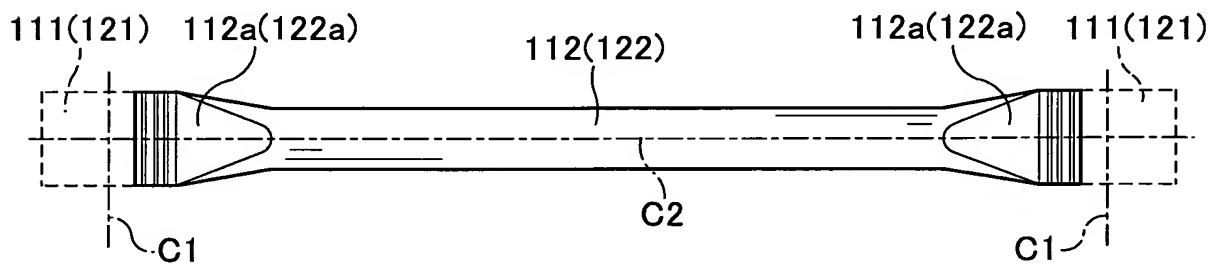
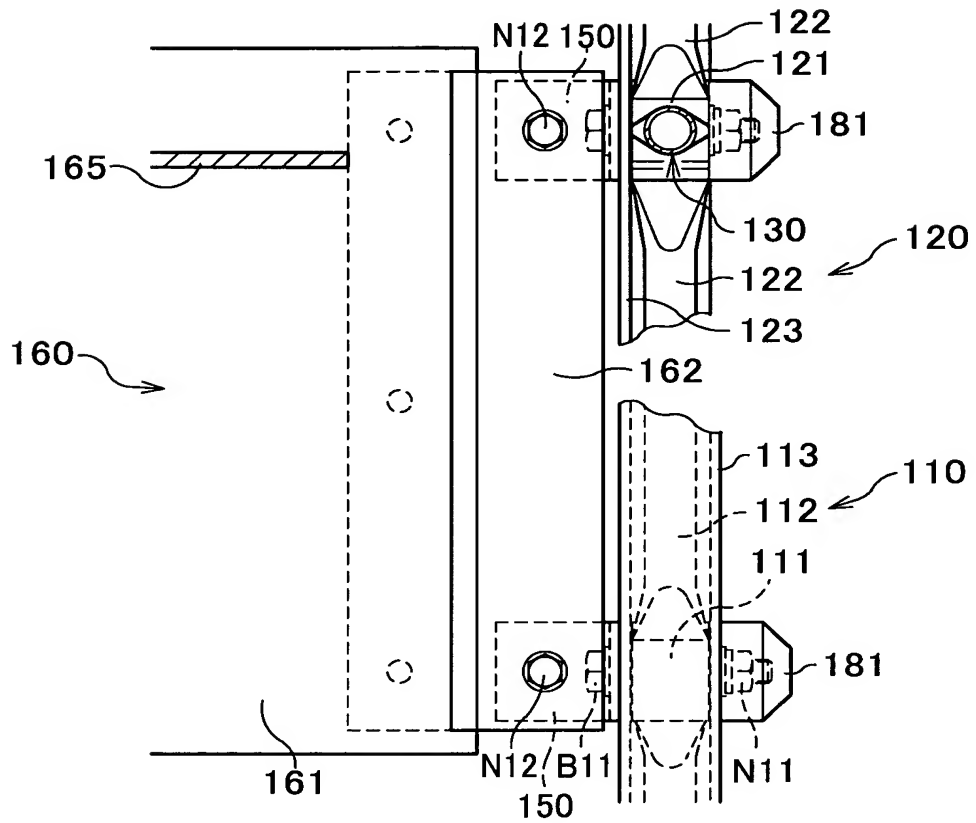
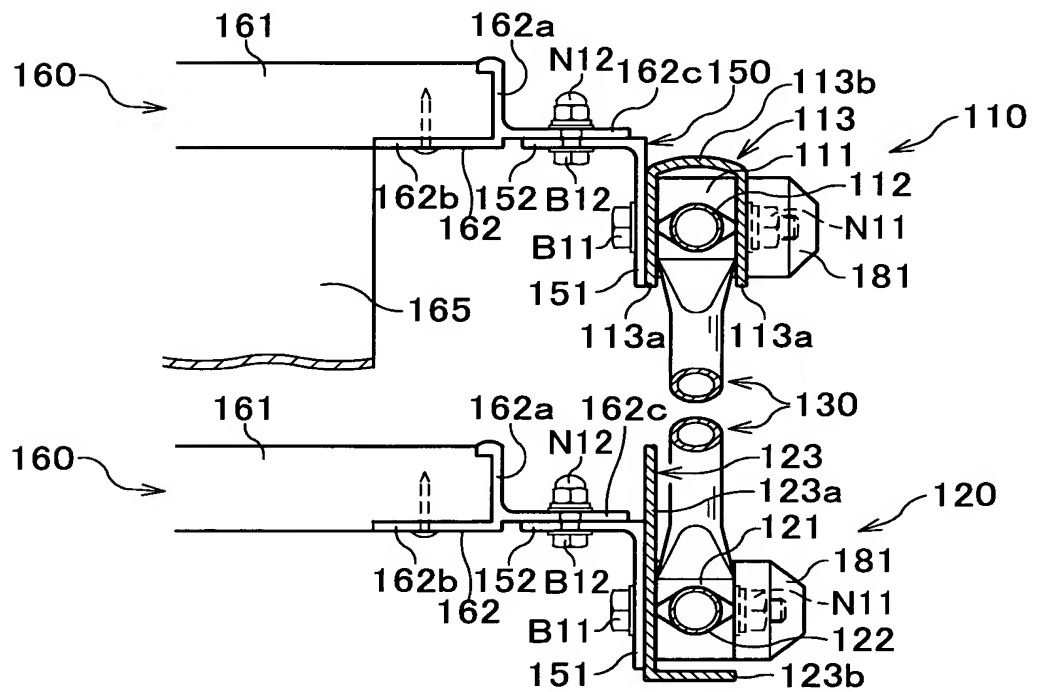


FIG. 47

(a)



(b)



(a)

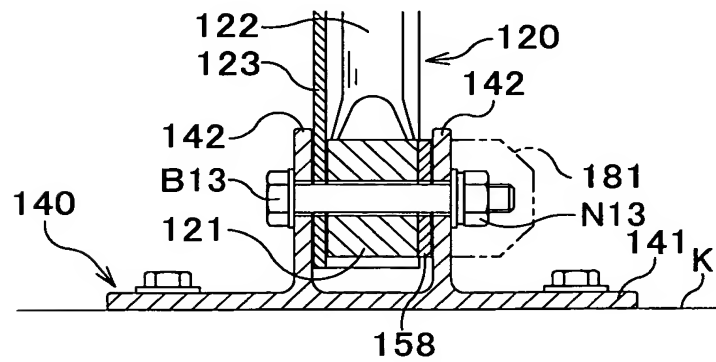




FIG. 49

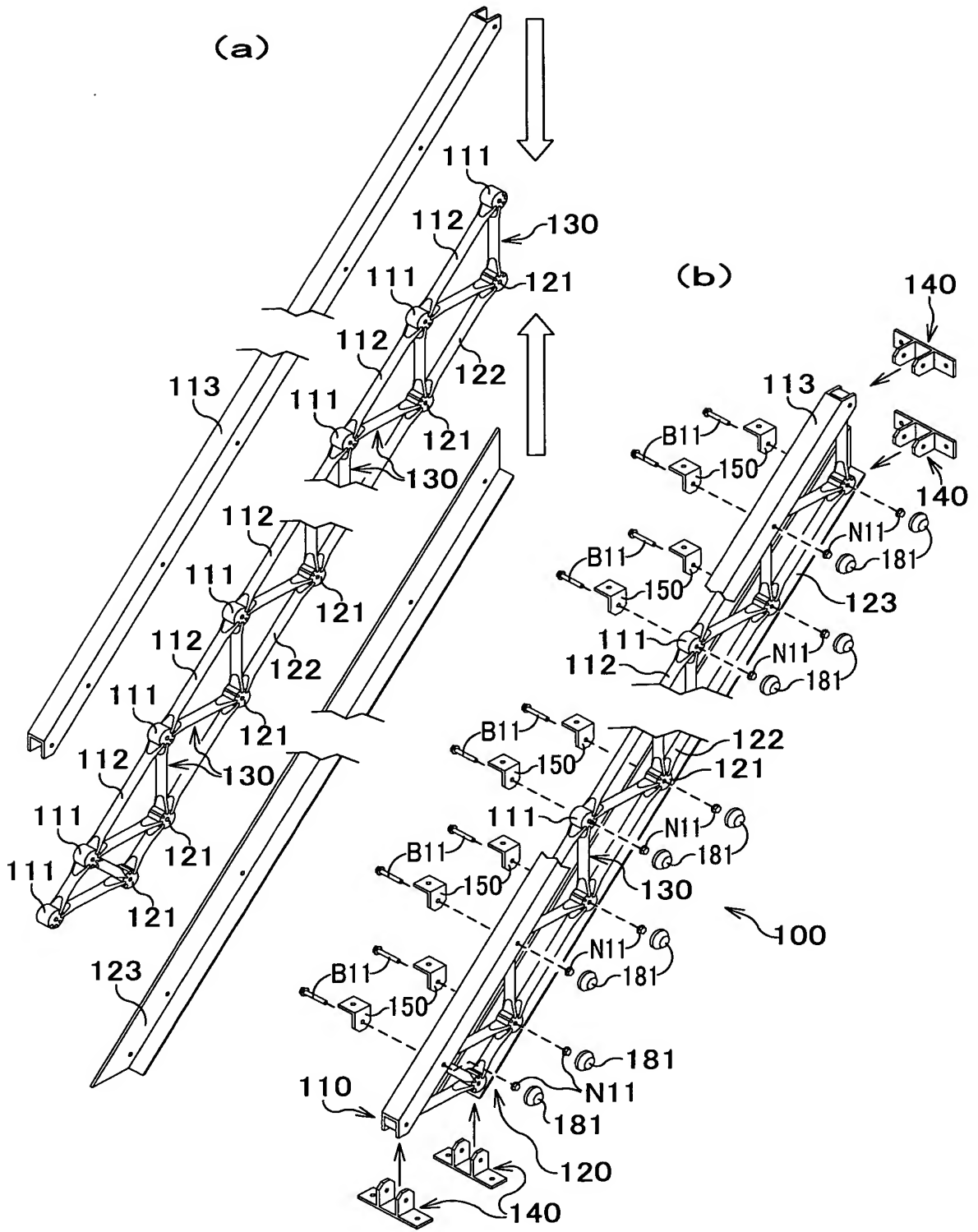


FIG. 50

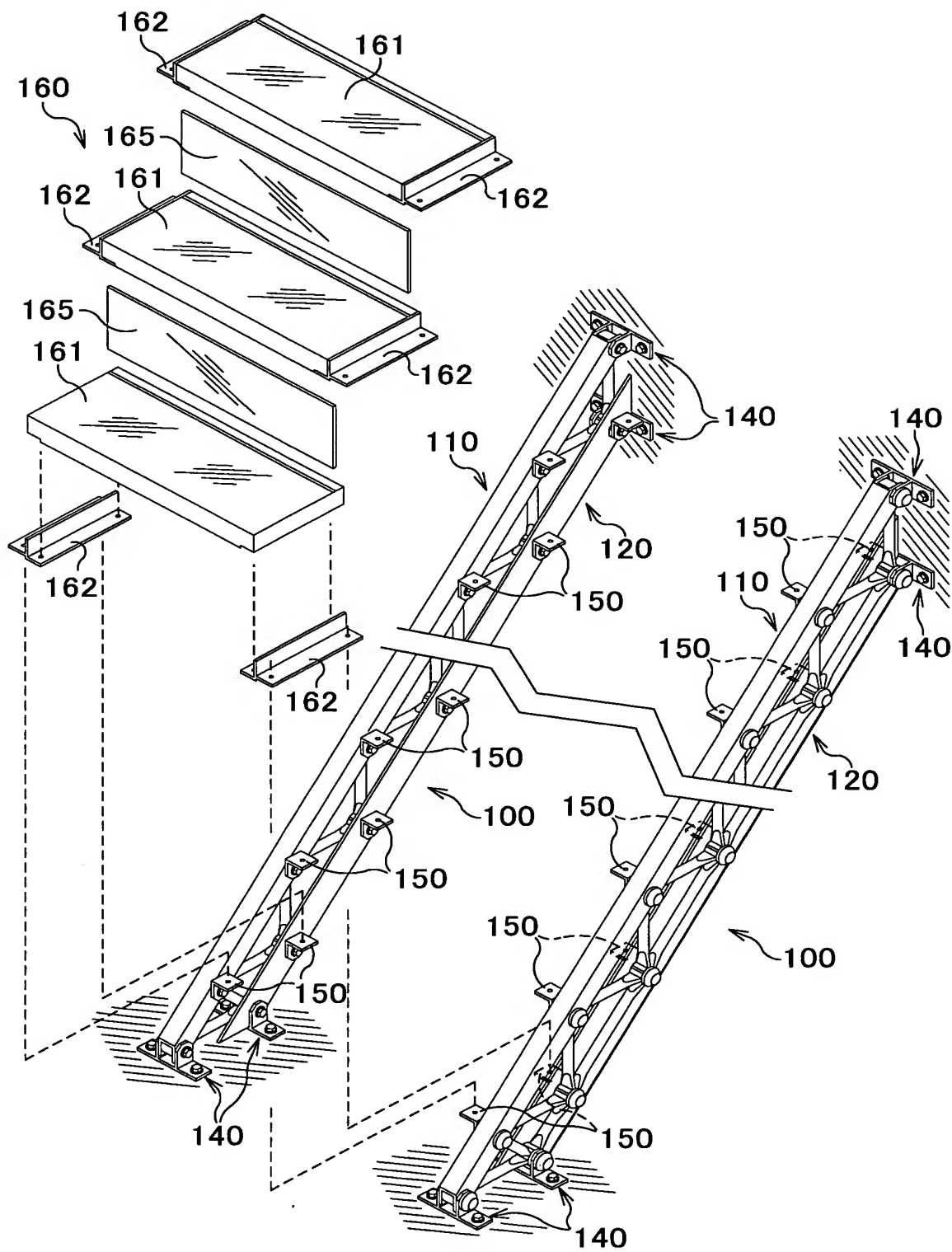




FIG. 52

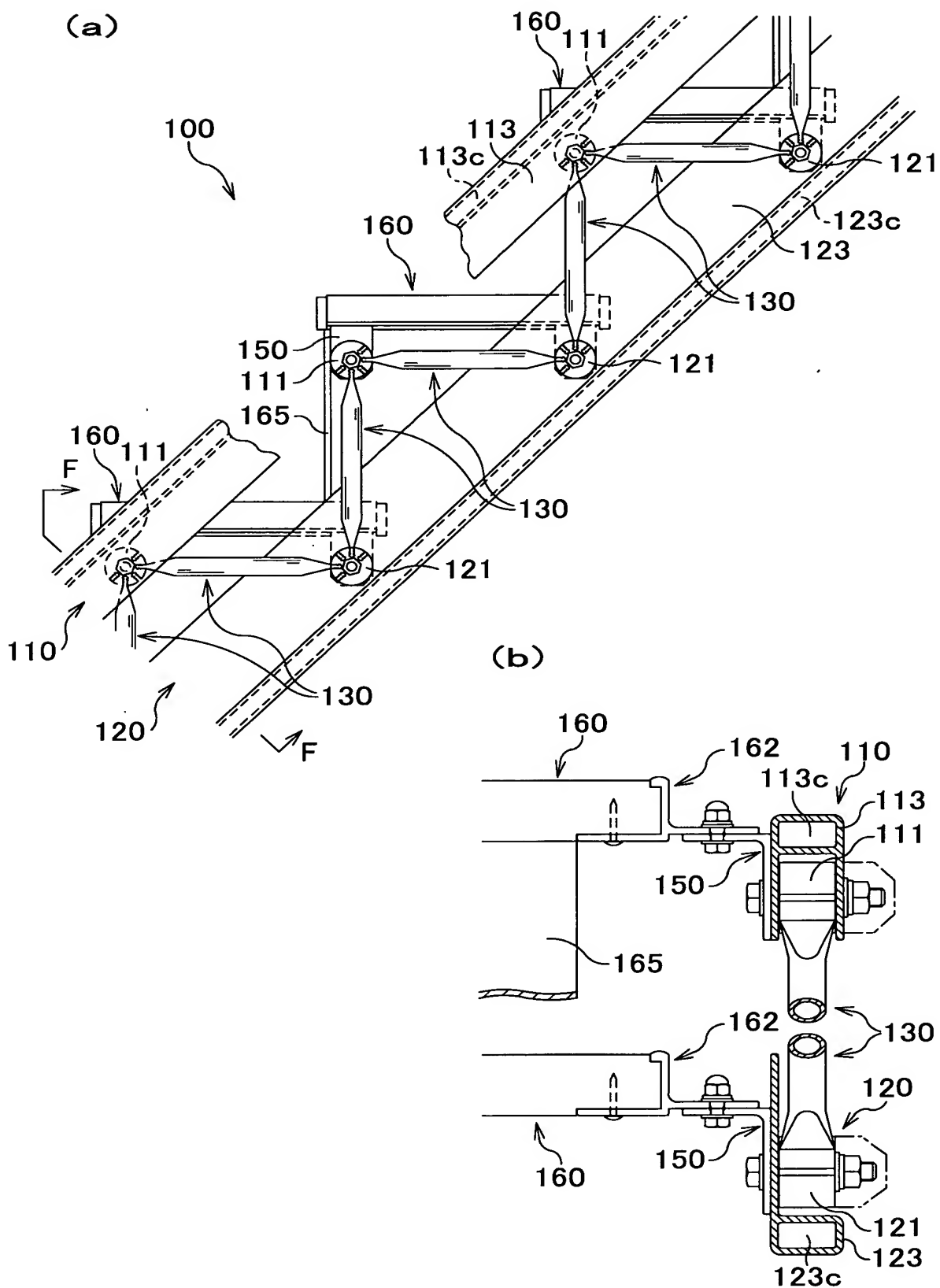


FIG. 53



FIG. 54

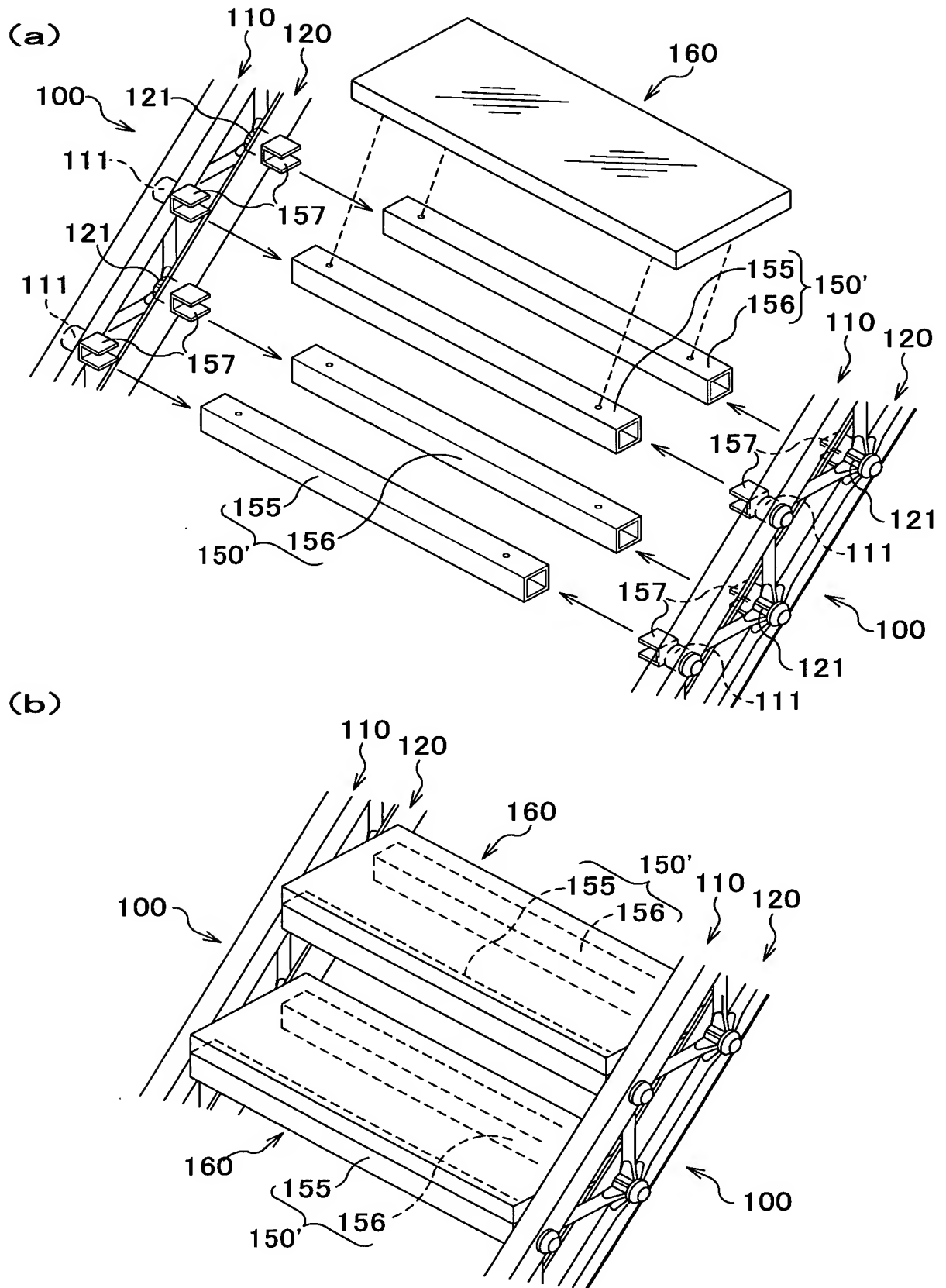


FIG. 55

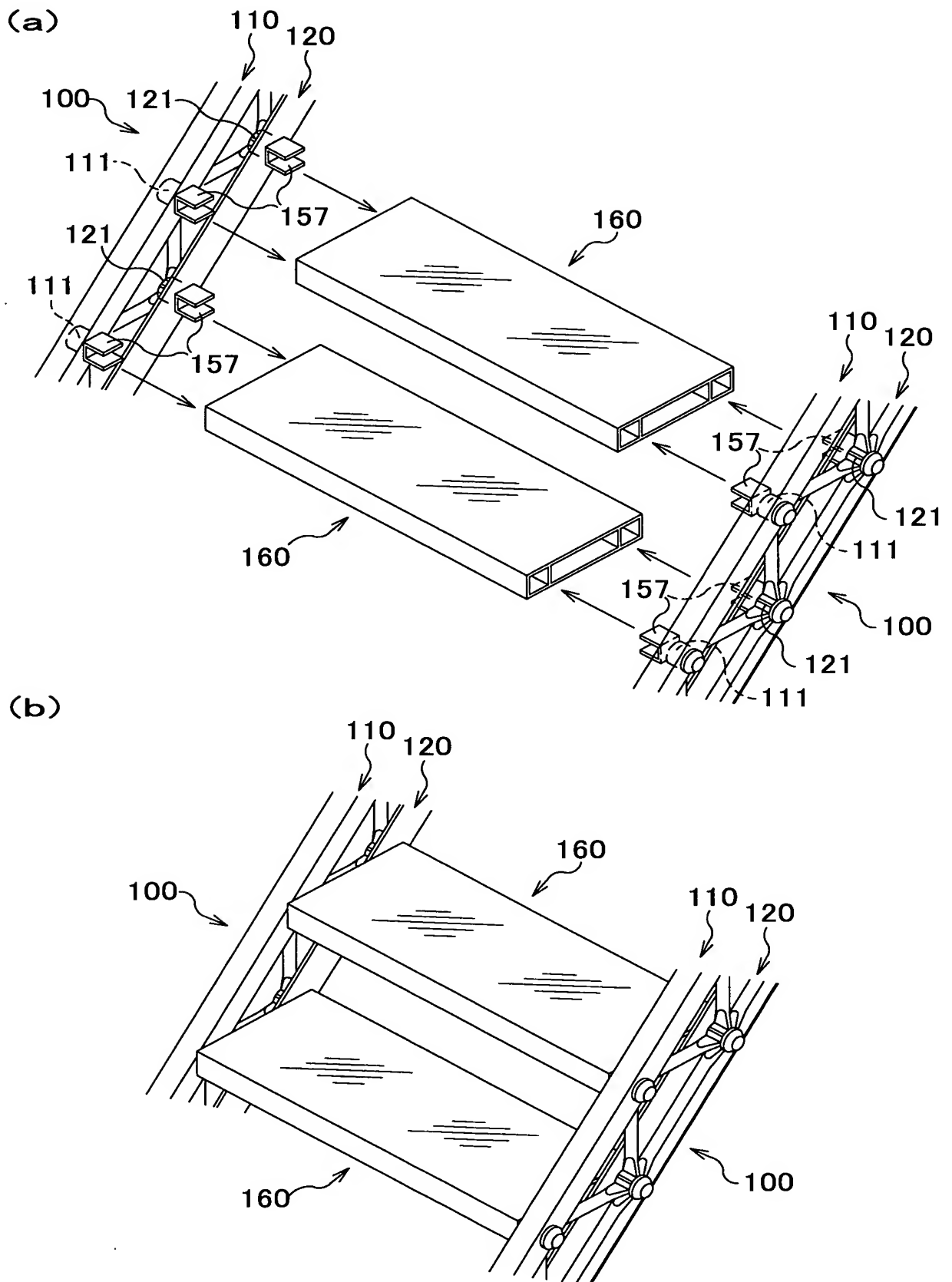


FIG. 56

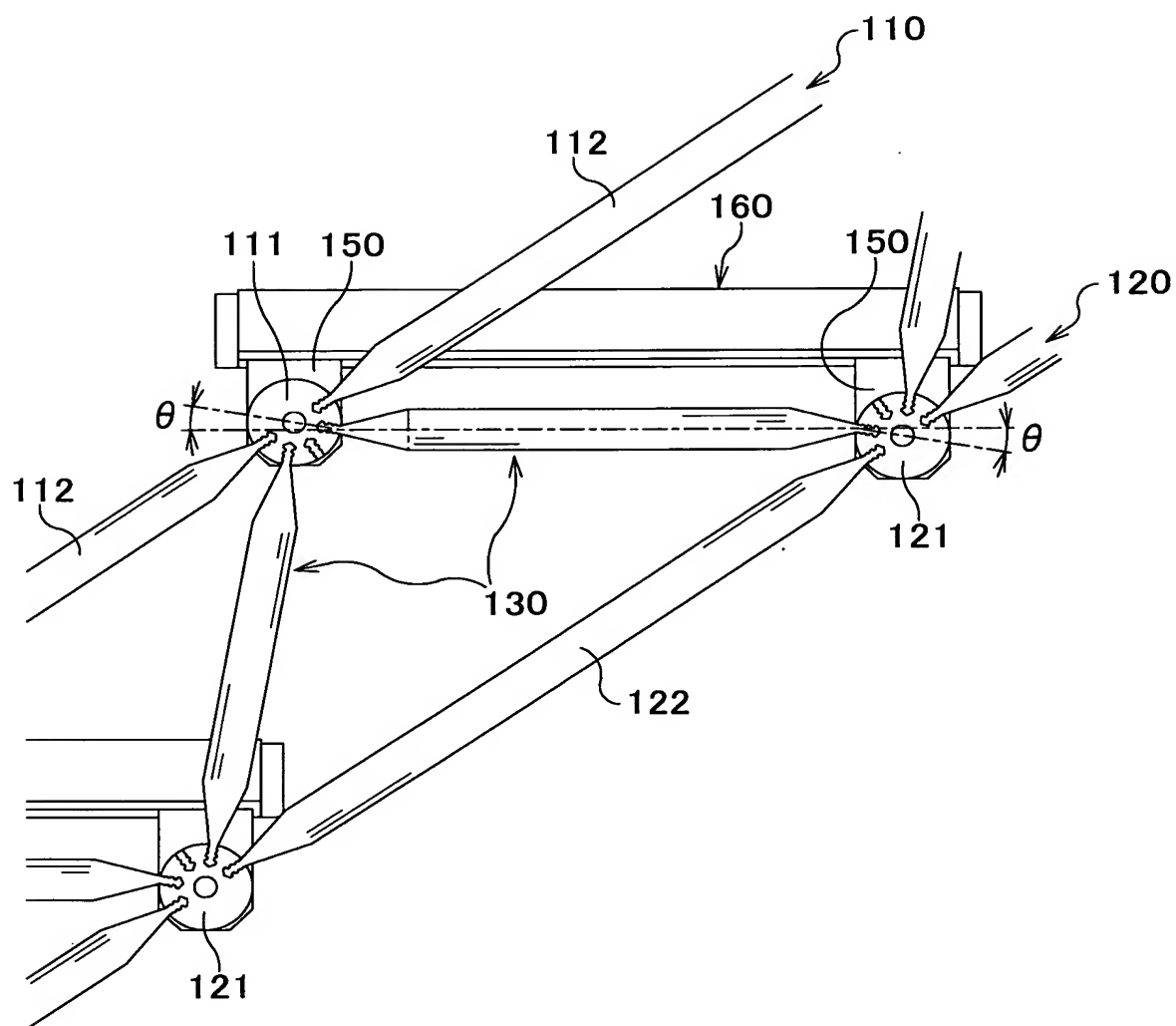




FIG. 57

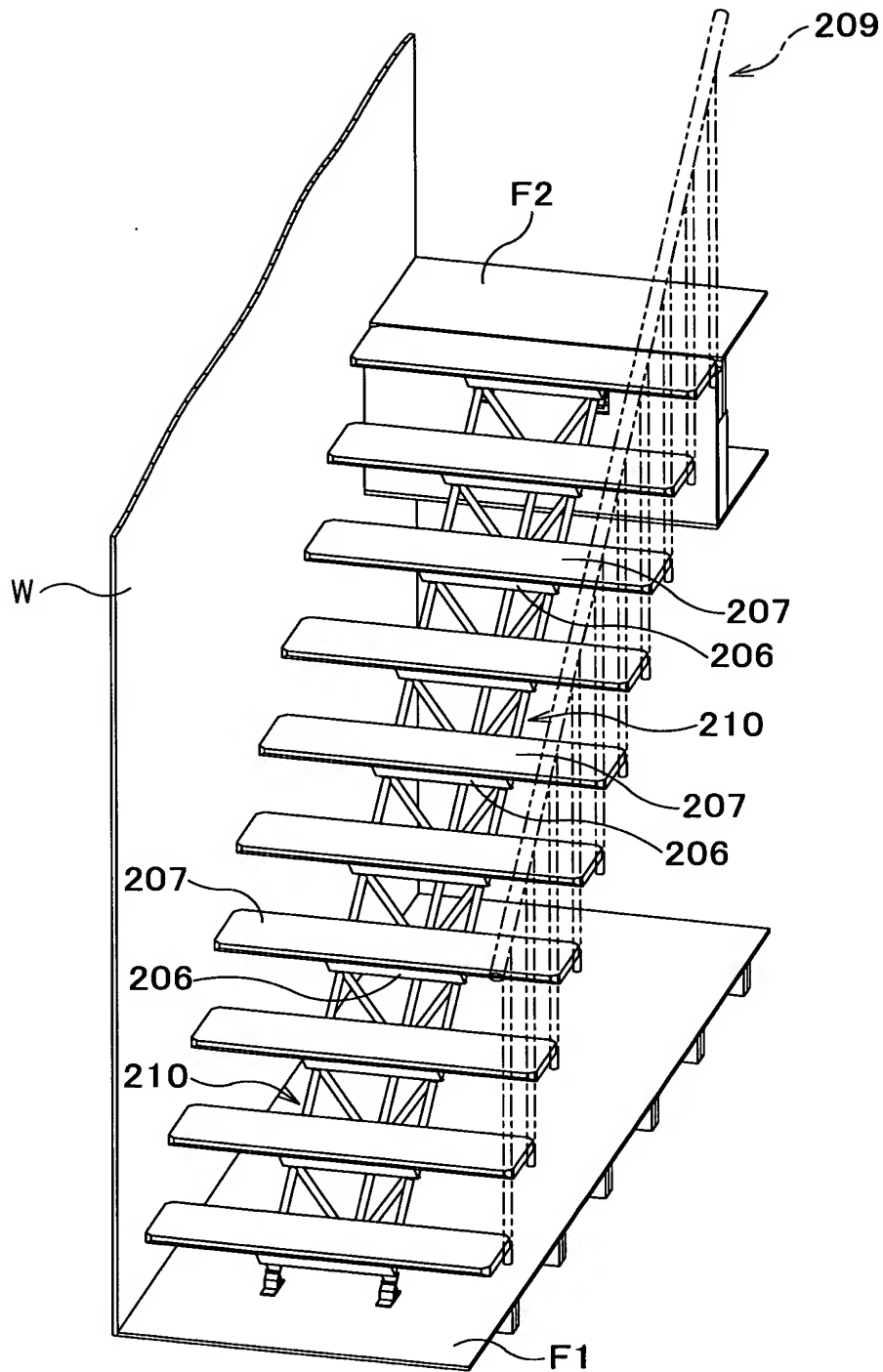


FIG. 58

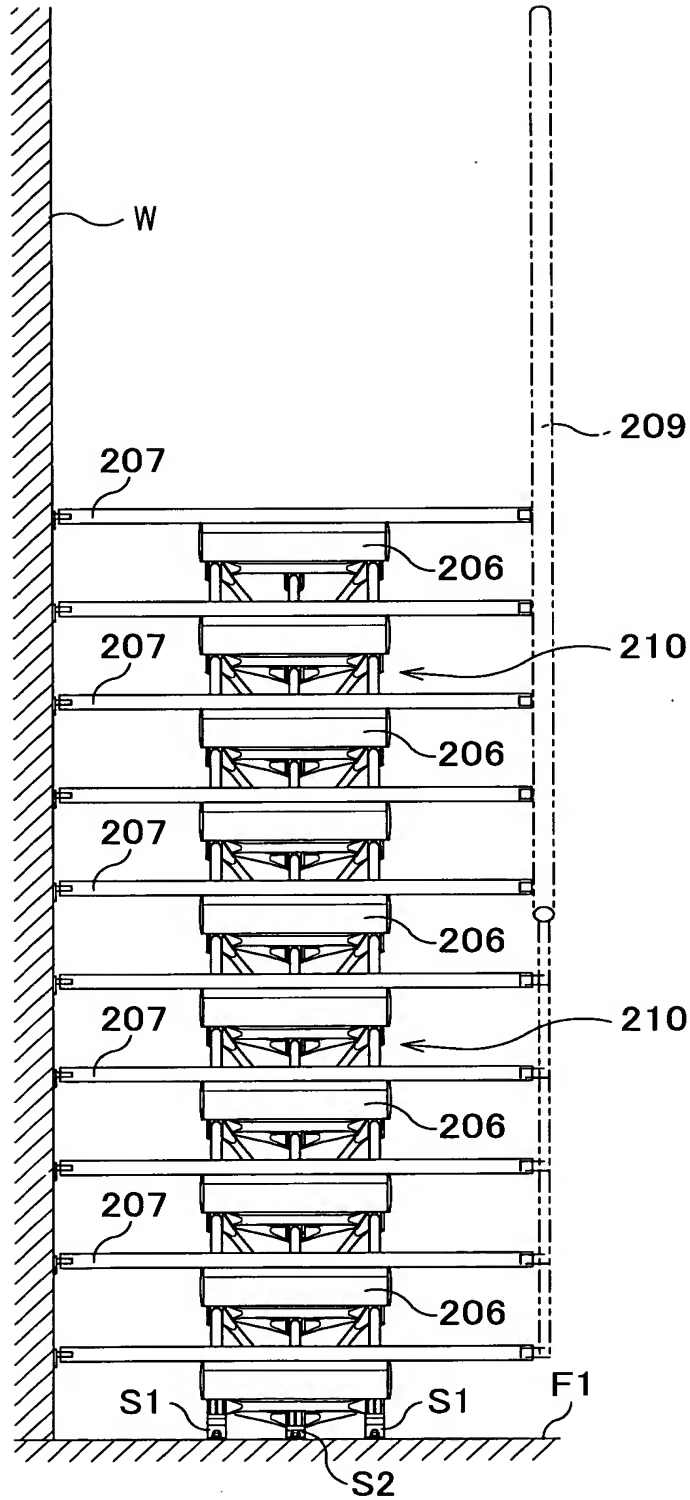


FIG. 59

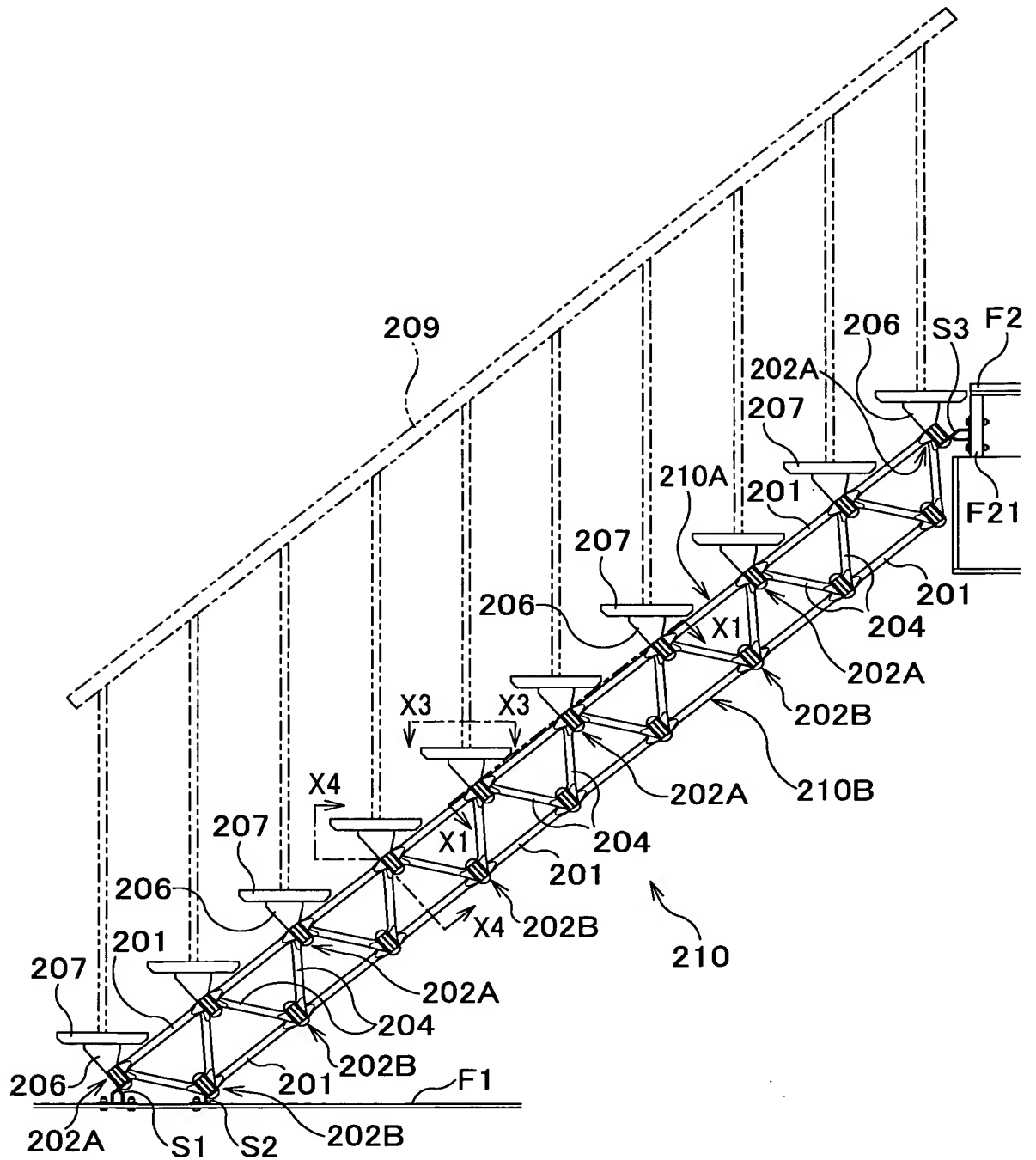
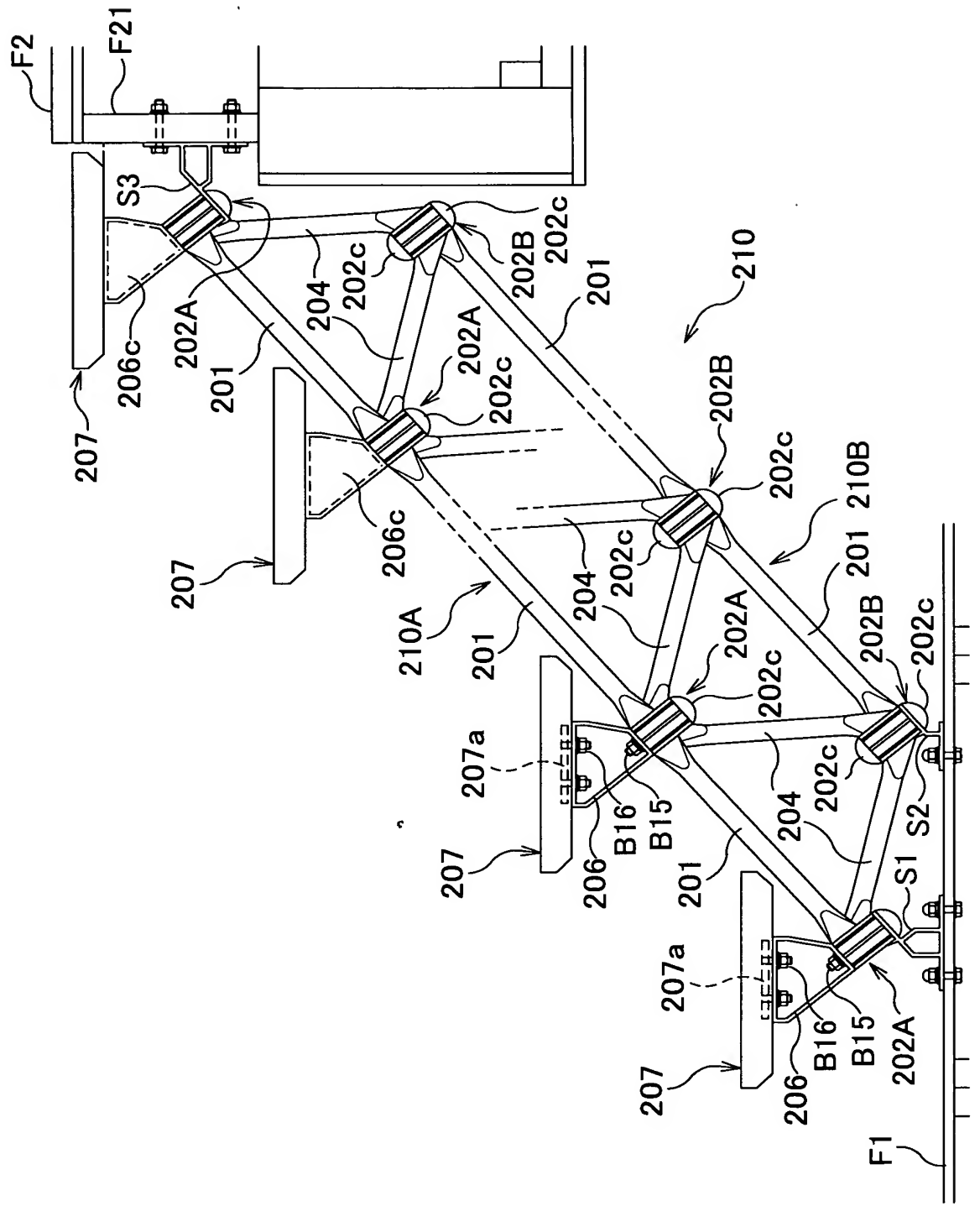


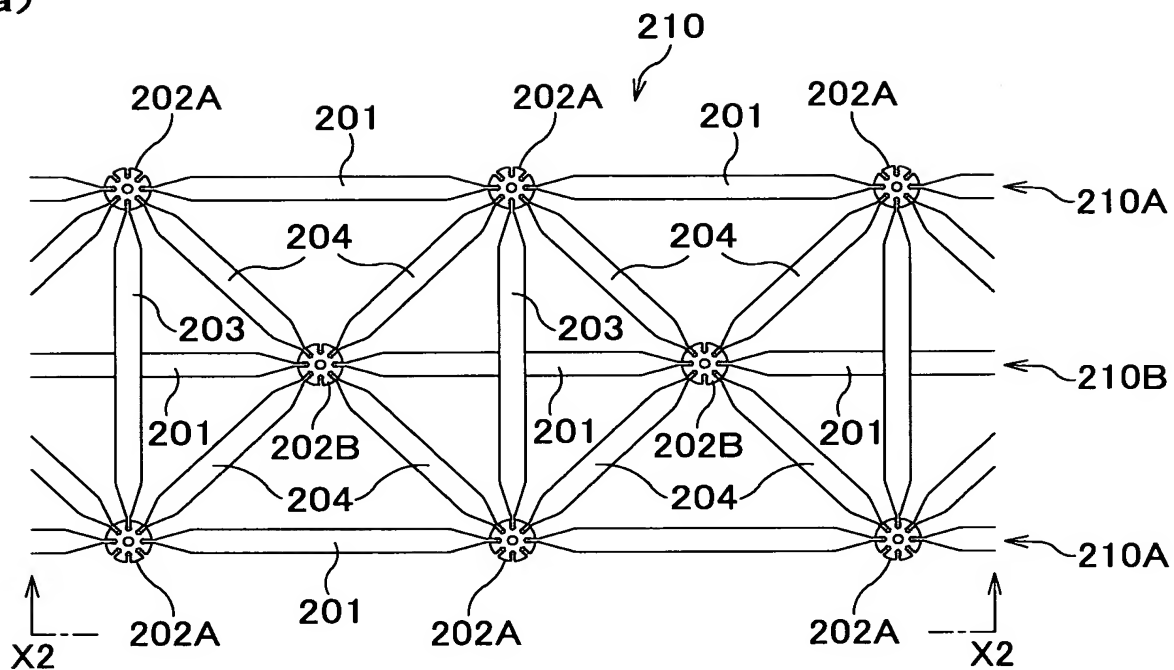
FIG. 60



[illegible]

FIG. 62

(a)



(b)

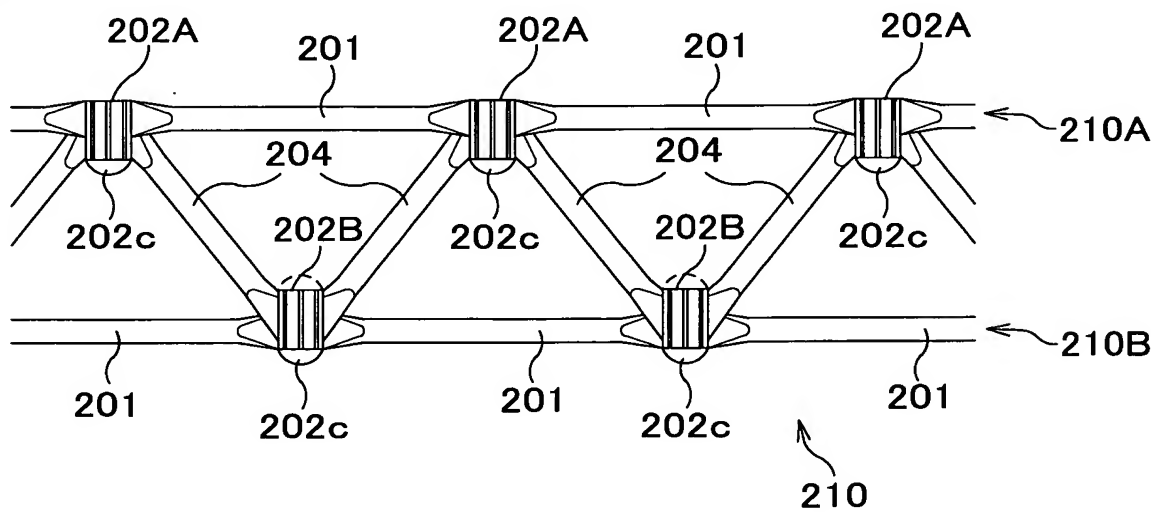


FIG. 63

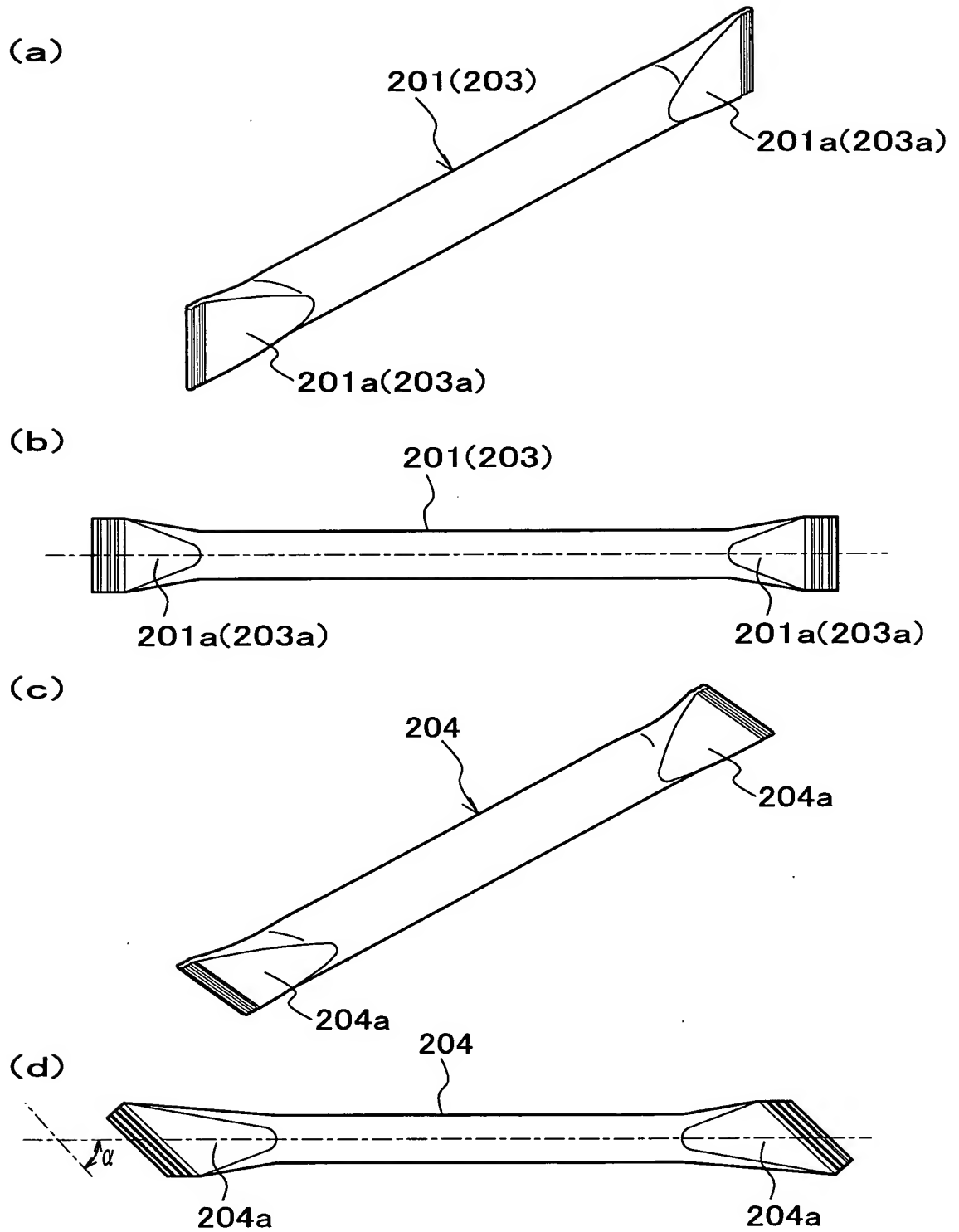


FIG. 64

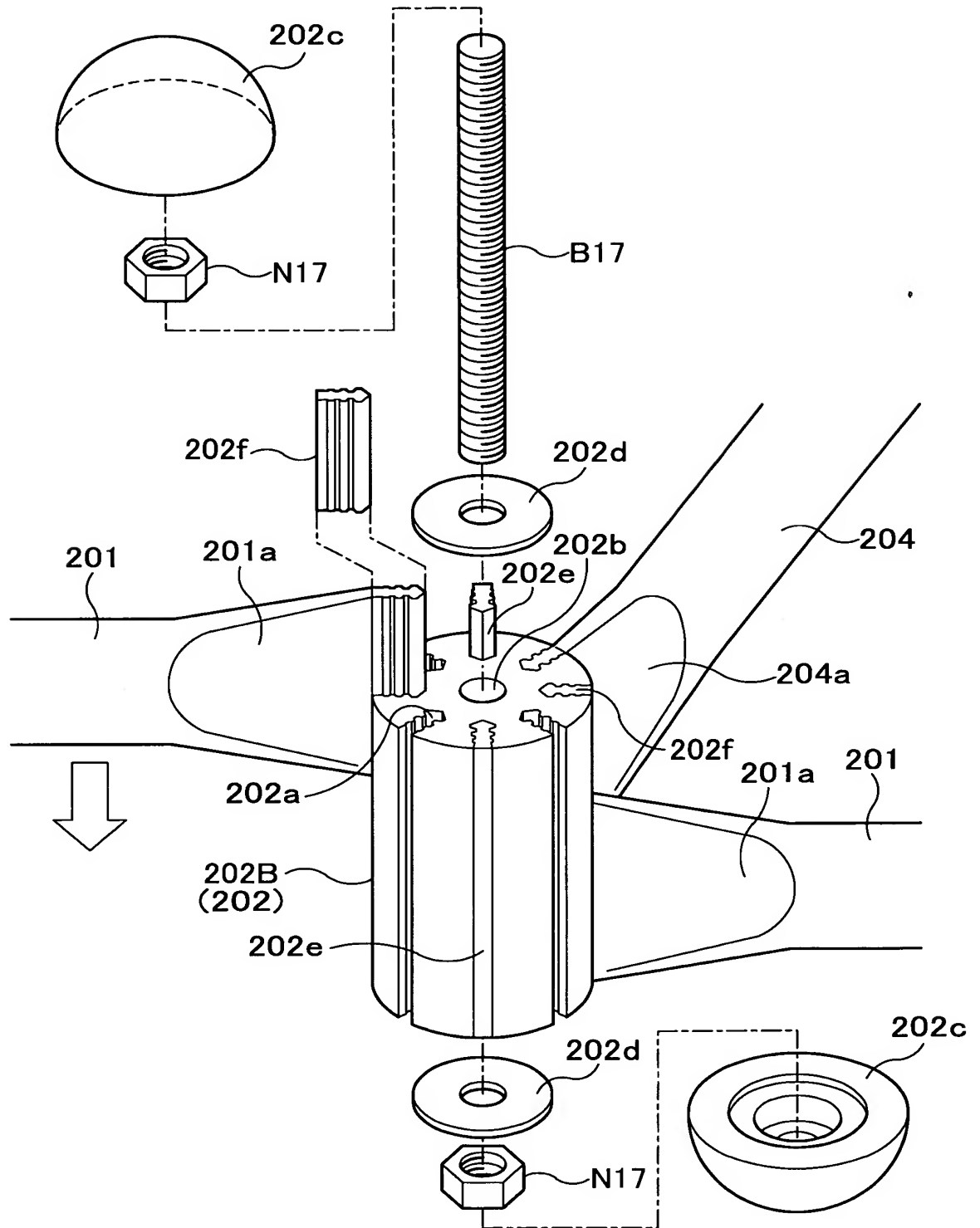




FIG. 65

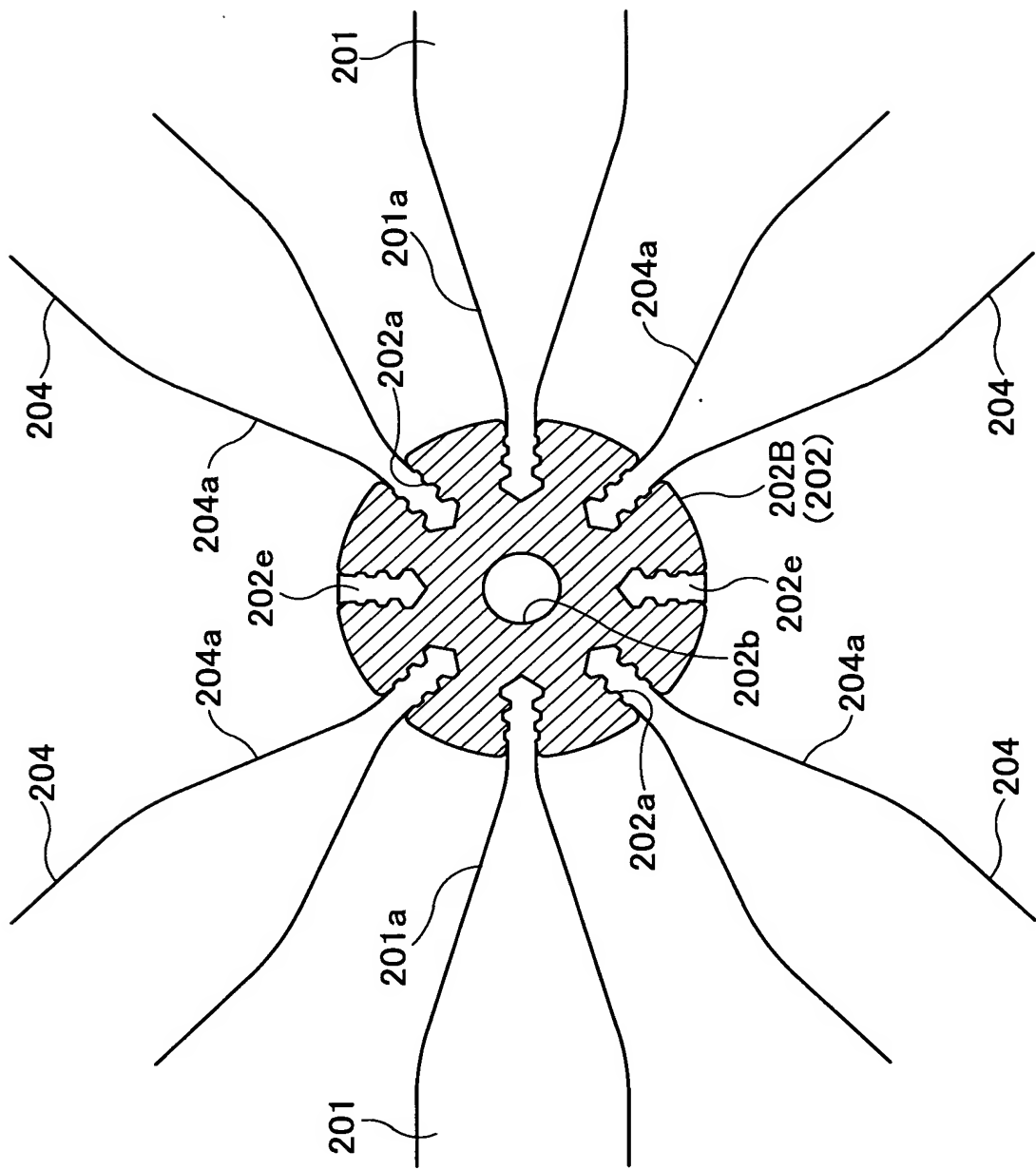


FIG. 66

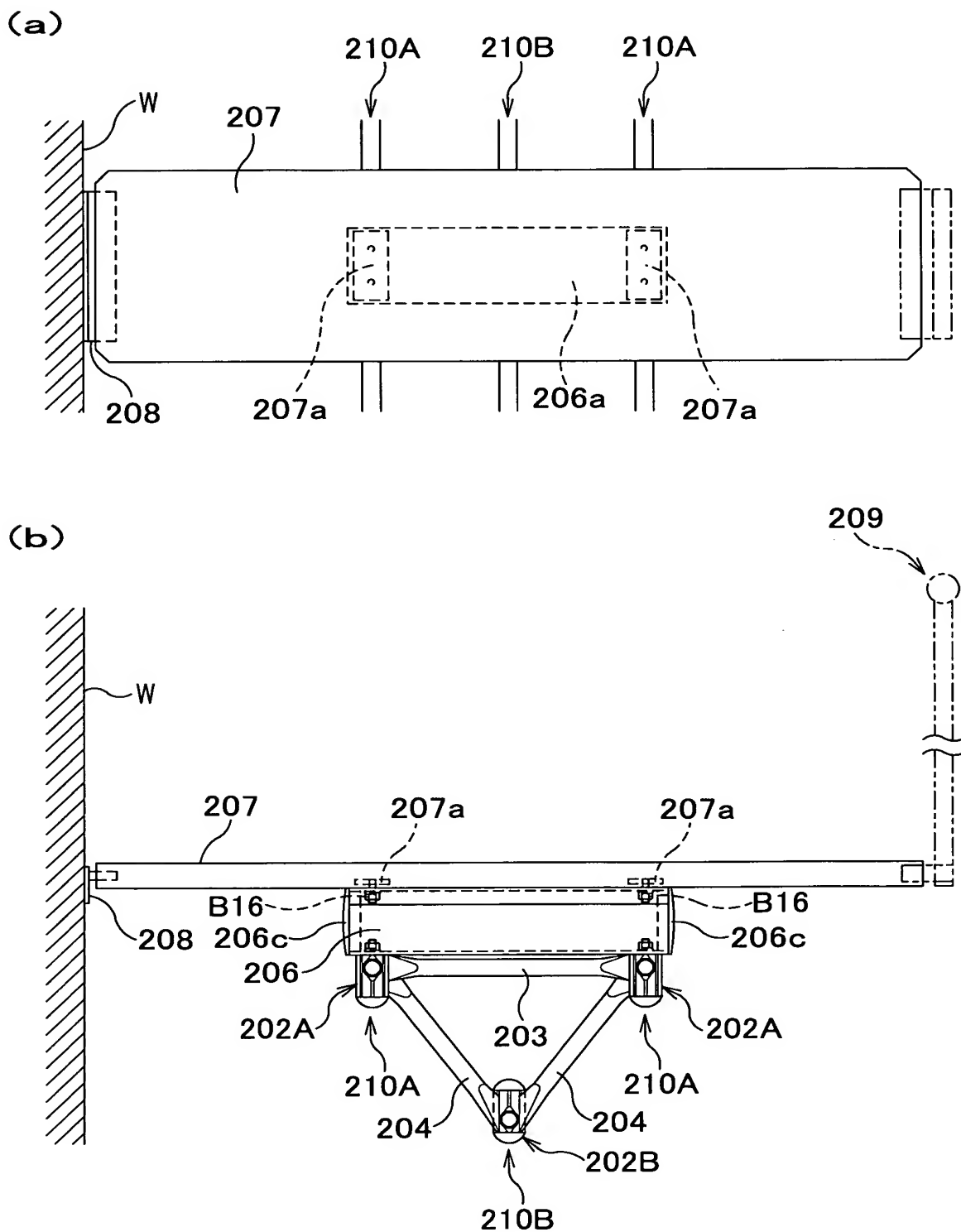


FIG. 67

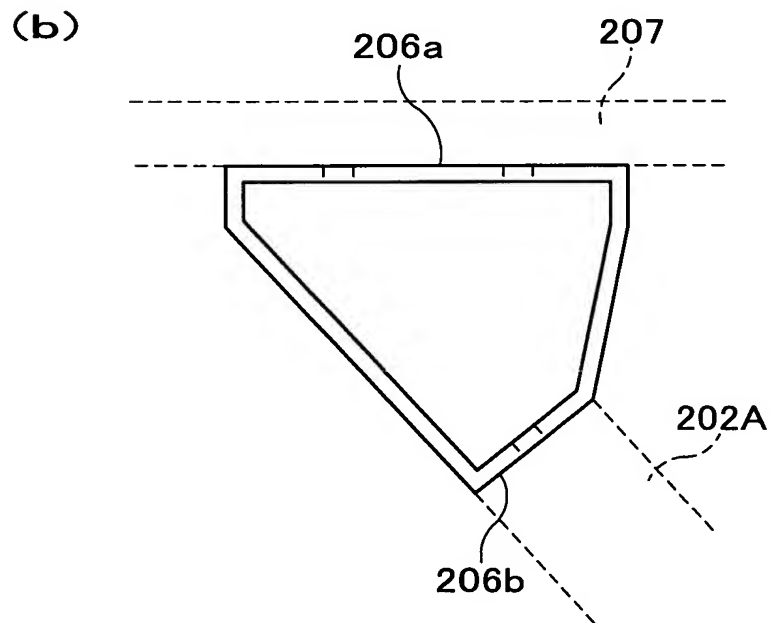
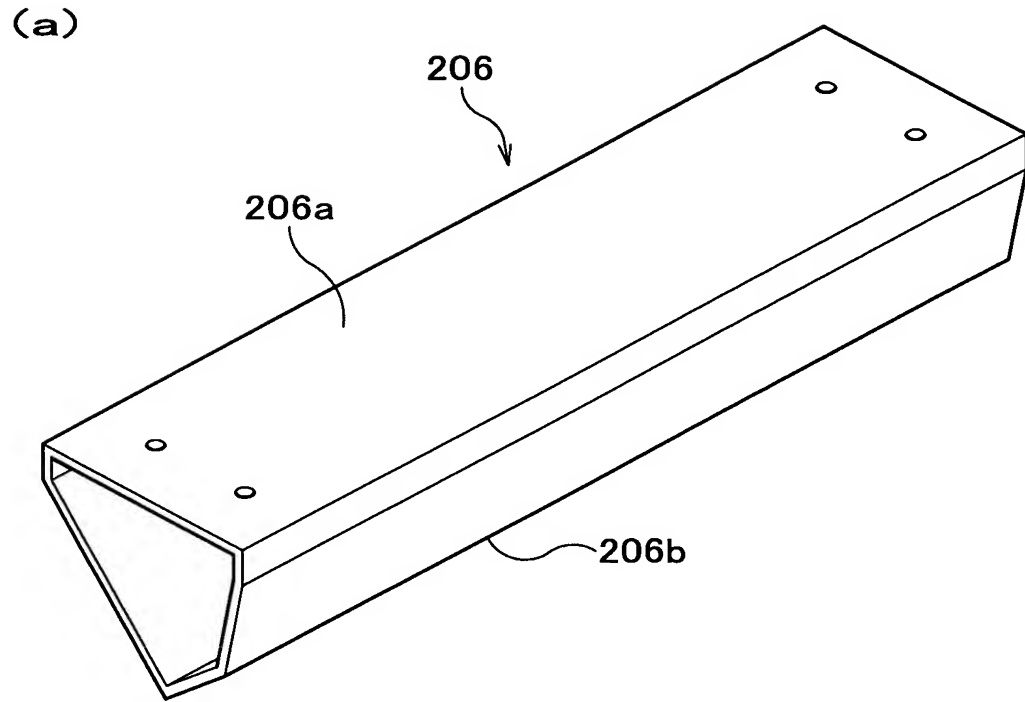


FIG. 68

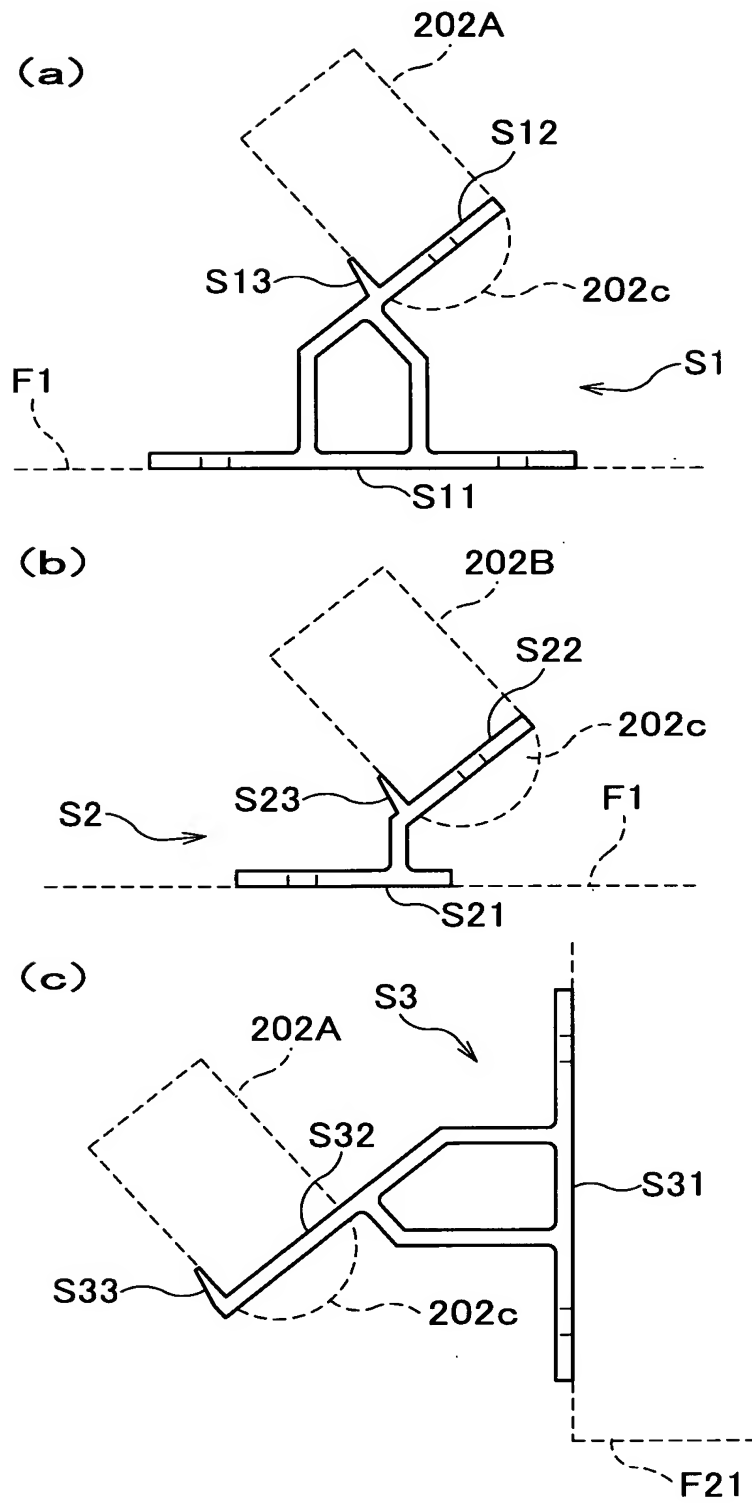


FIG. 69

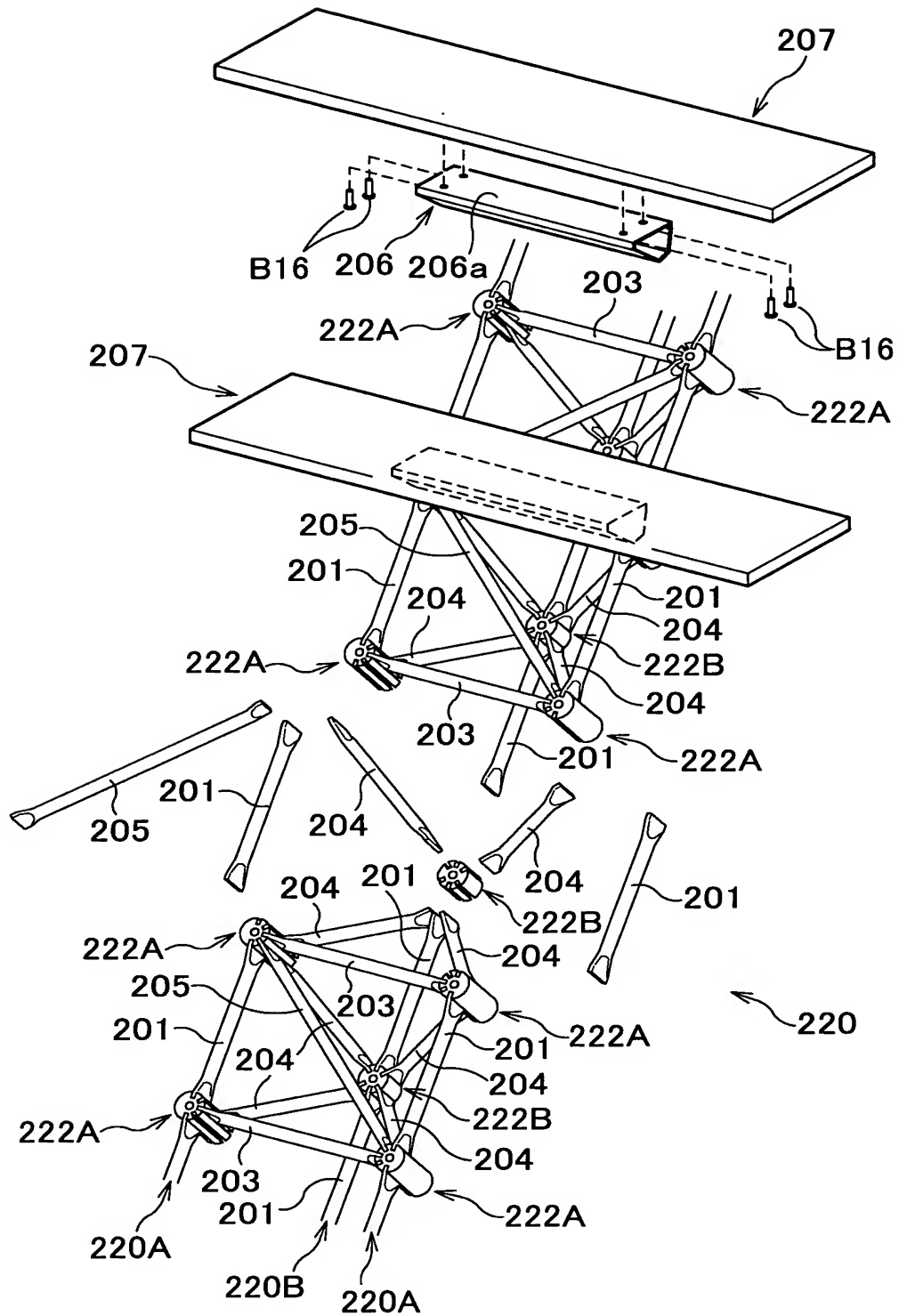


FIG. 70

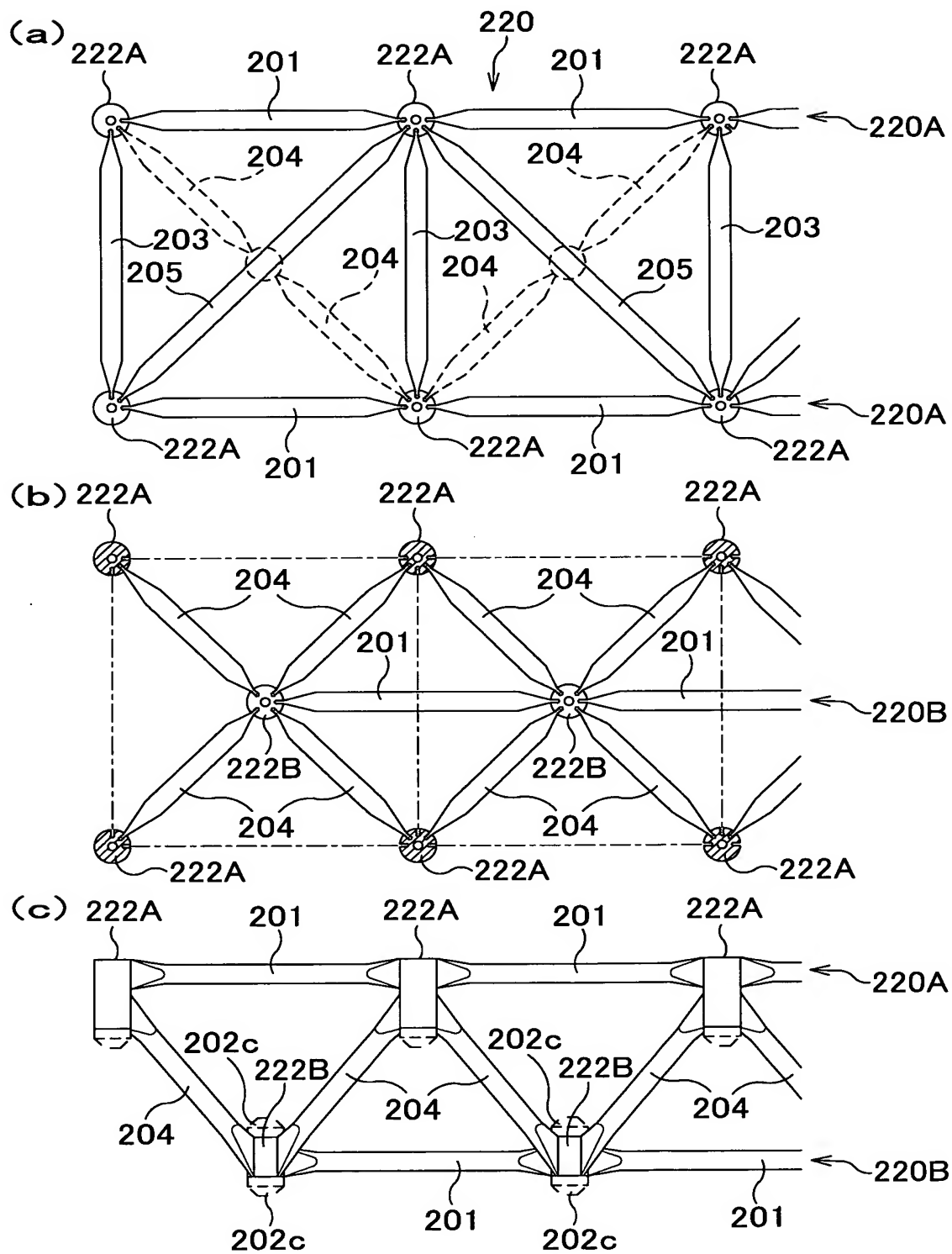




FIG. 72

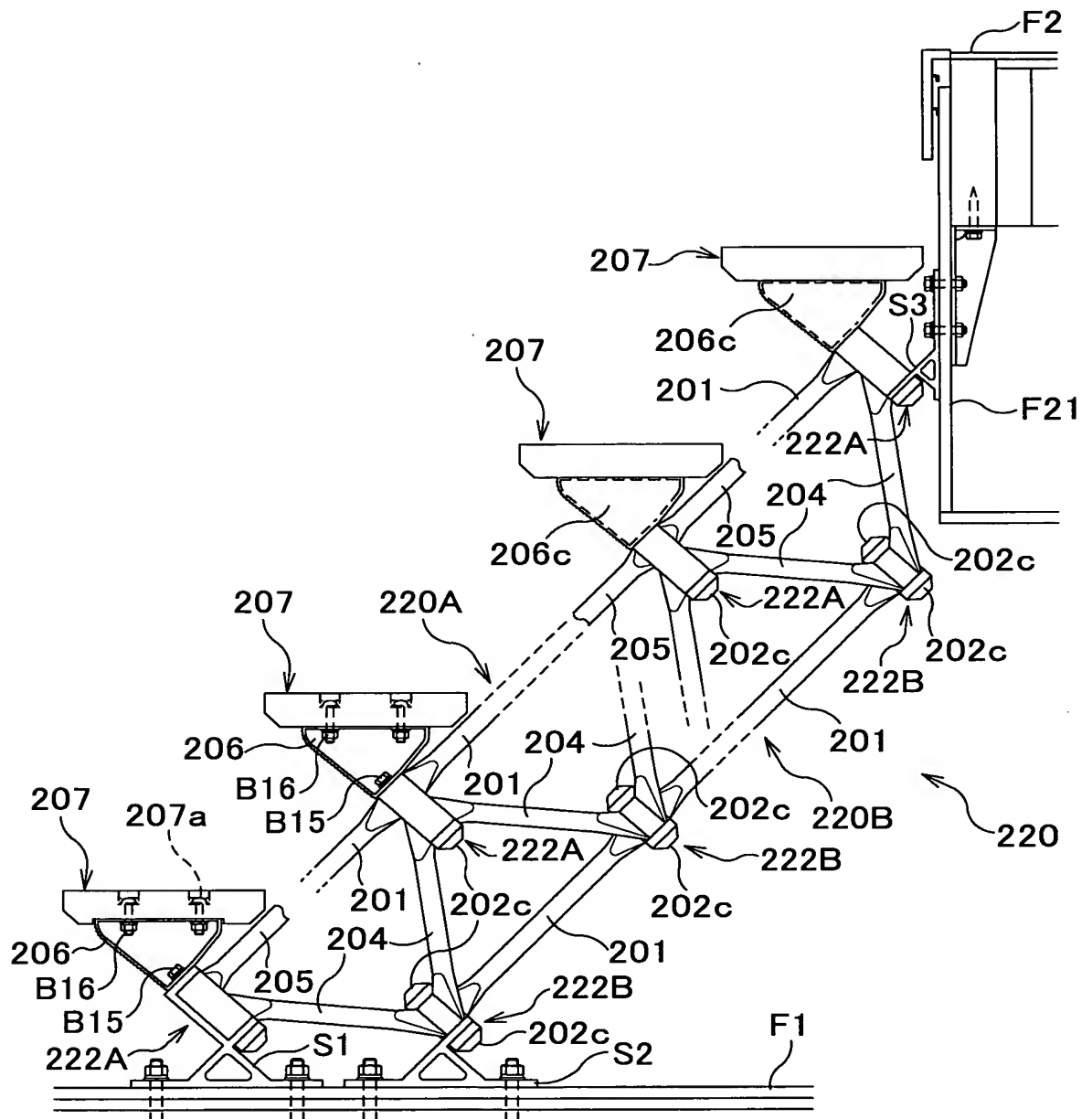




FIG. 73

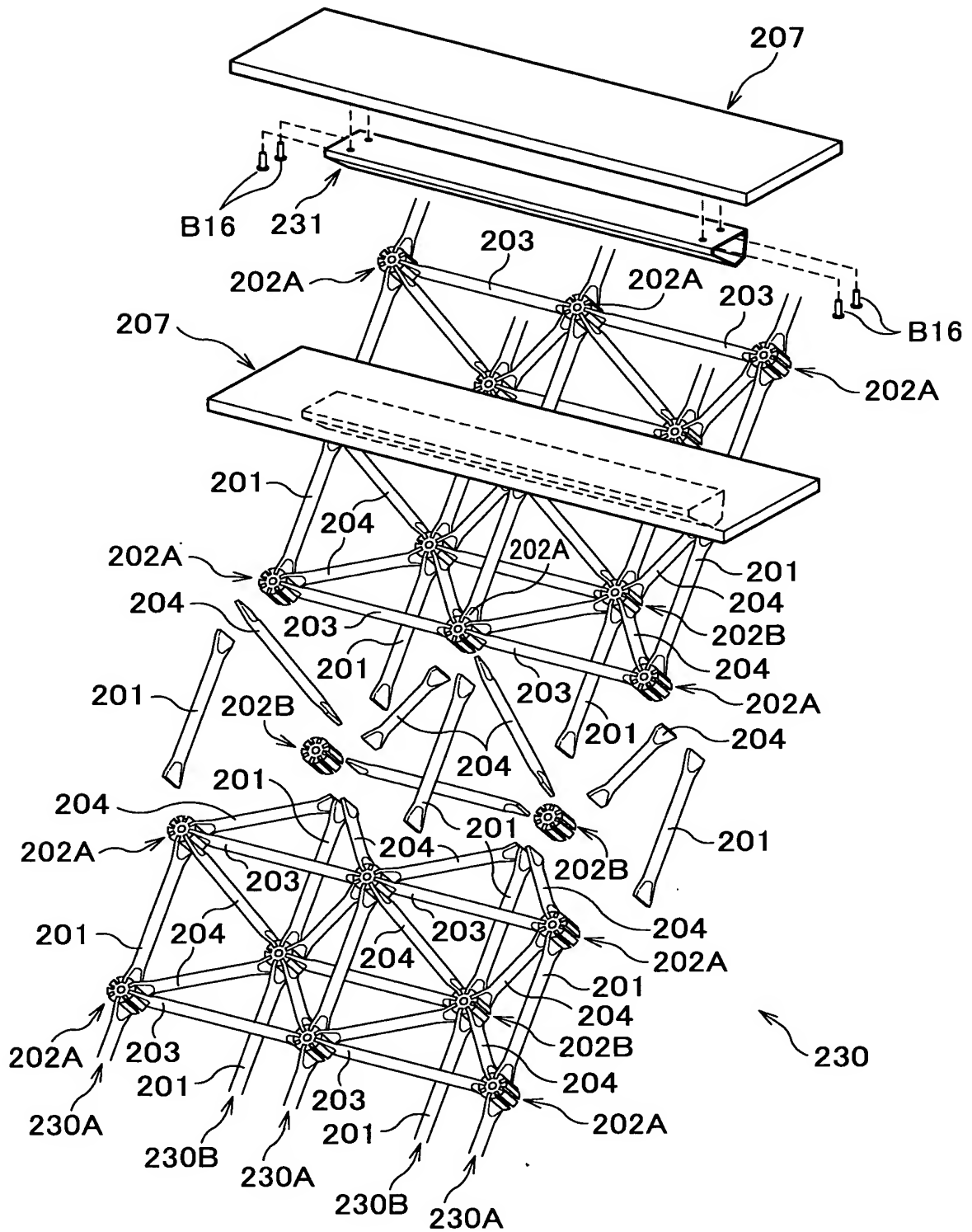
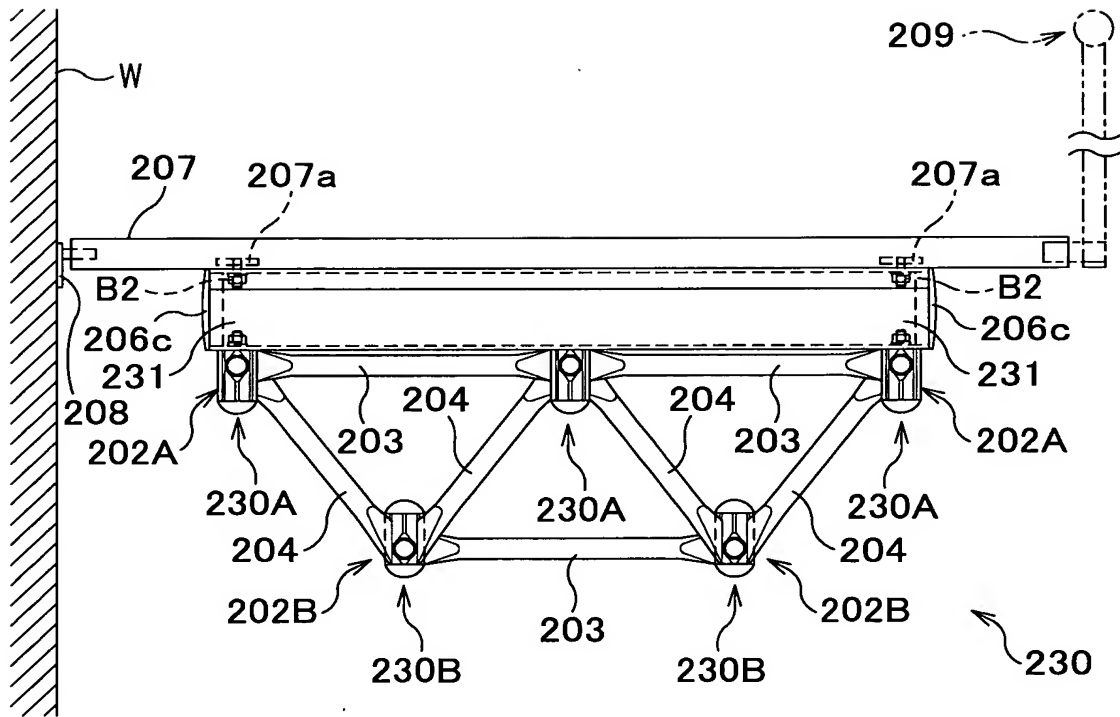


FIG. 74



[illegible]

FIG. 76

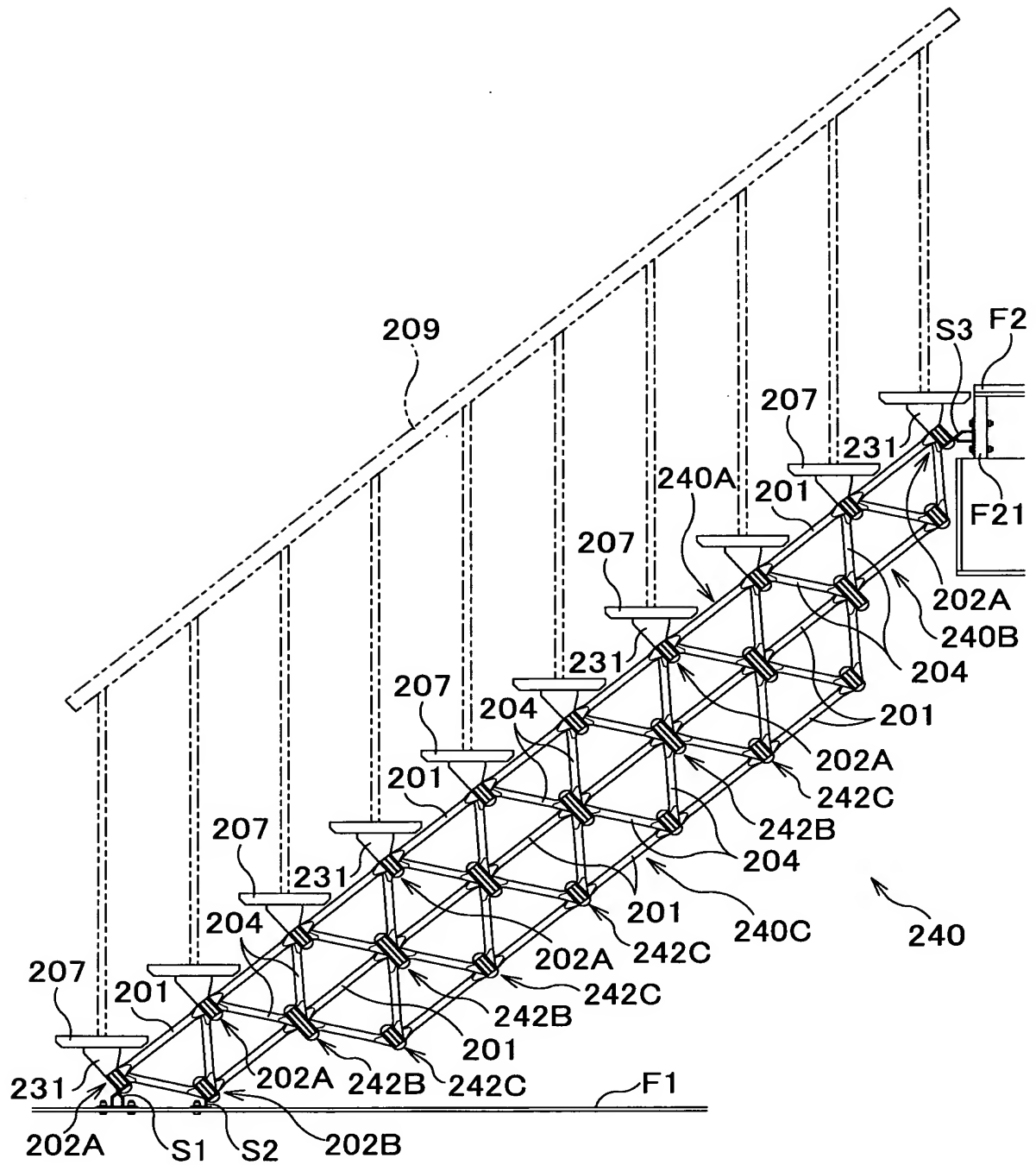




FIG. 78

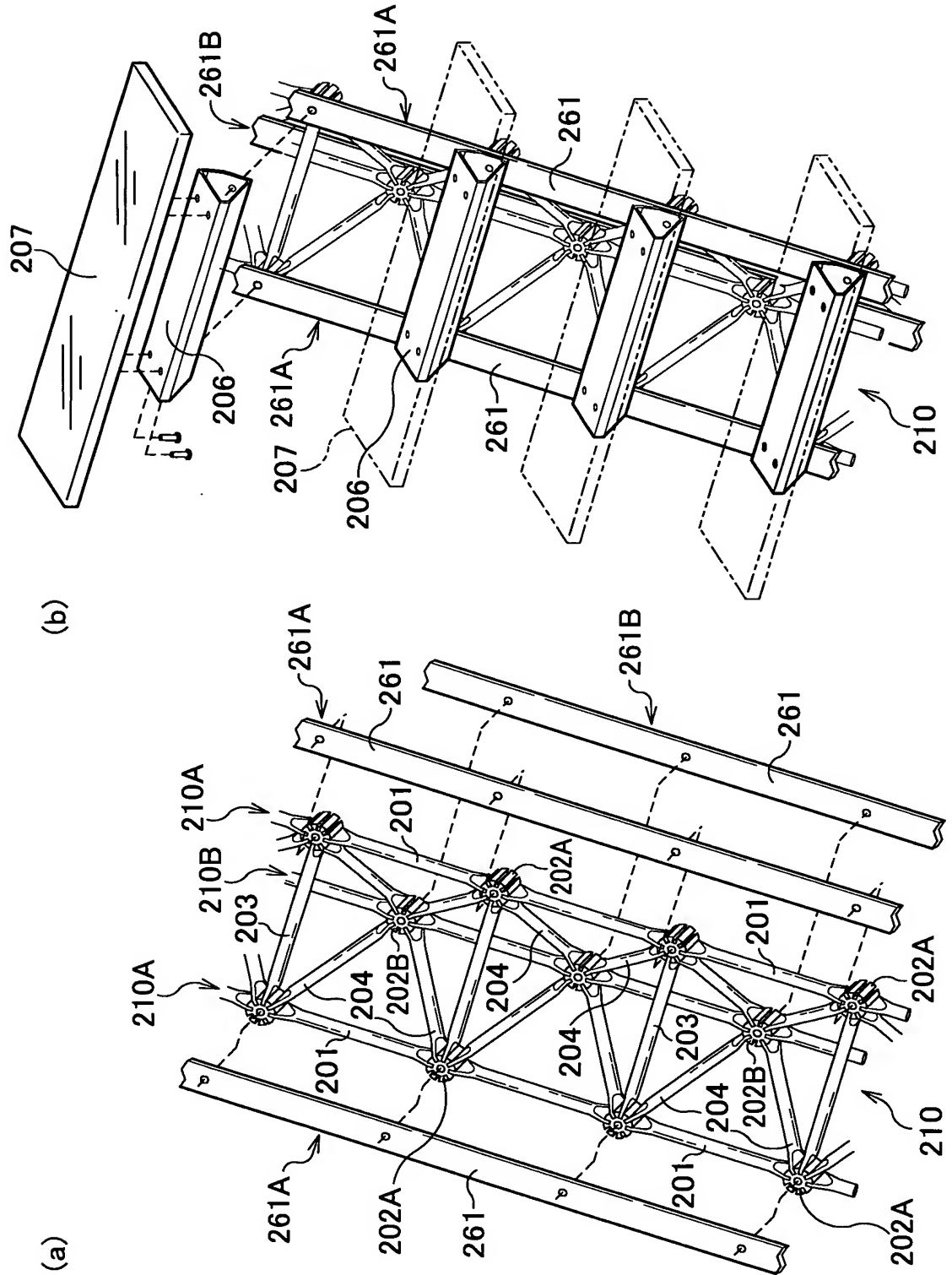
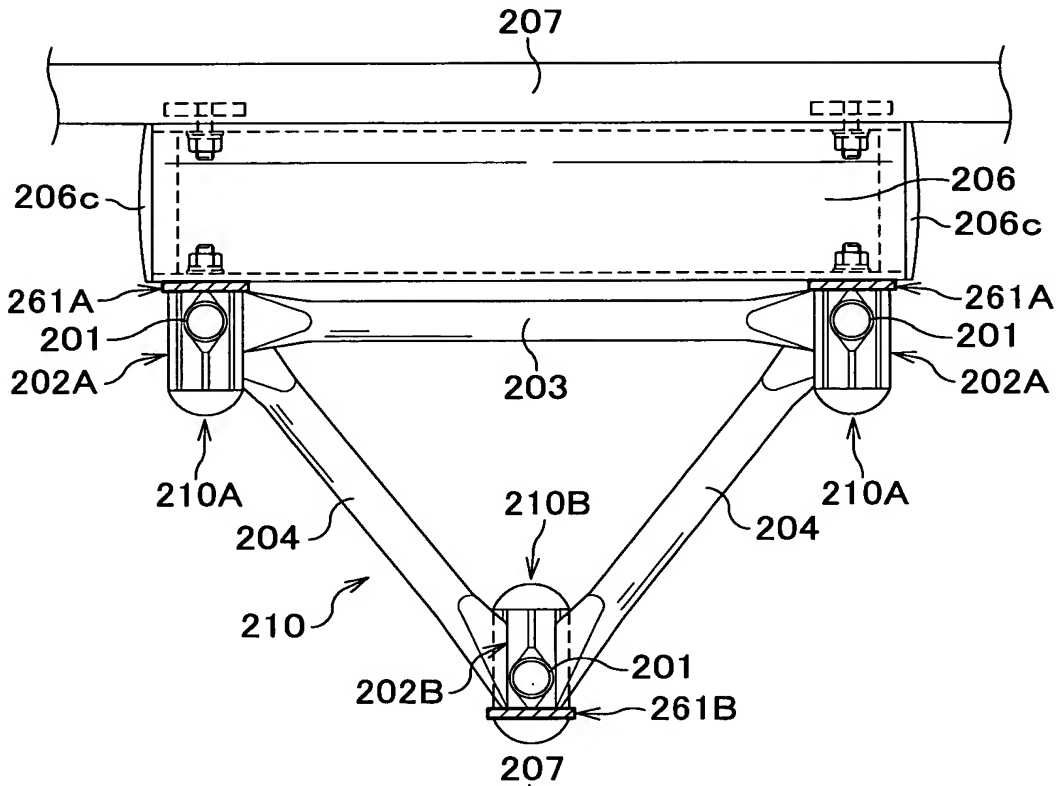


FIG. 79

(a)



(b)

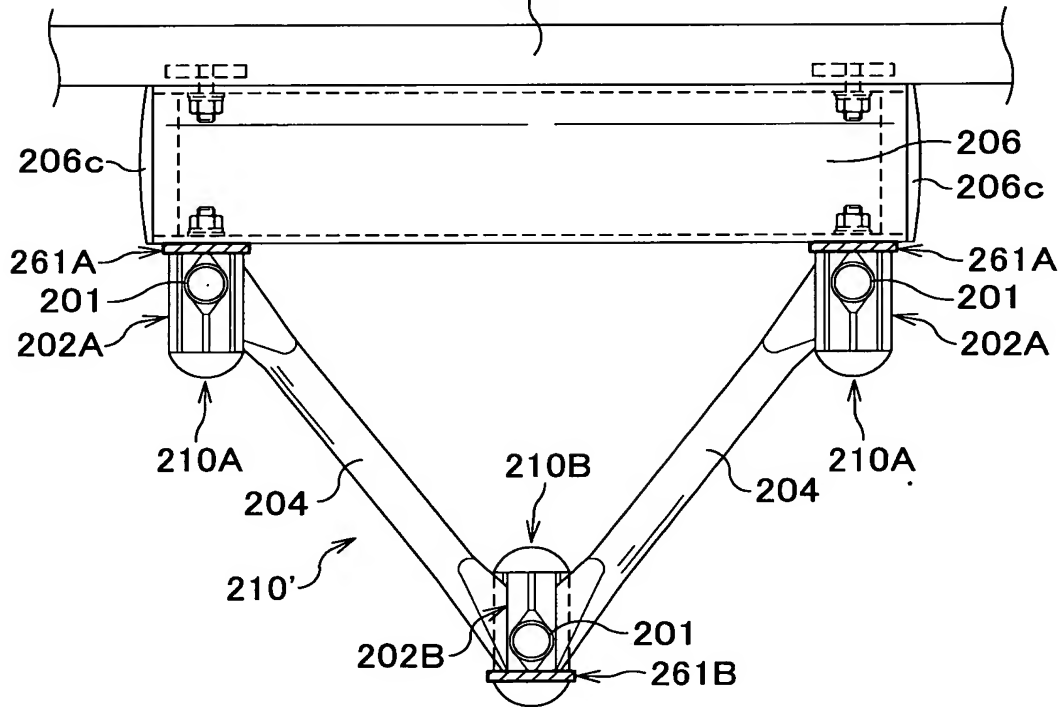
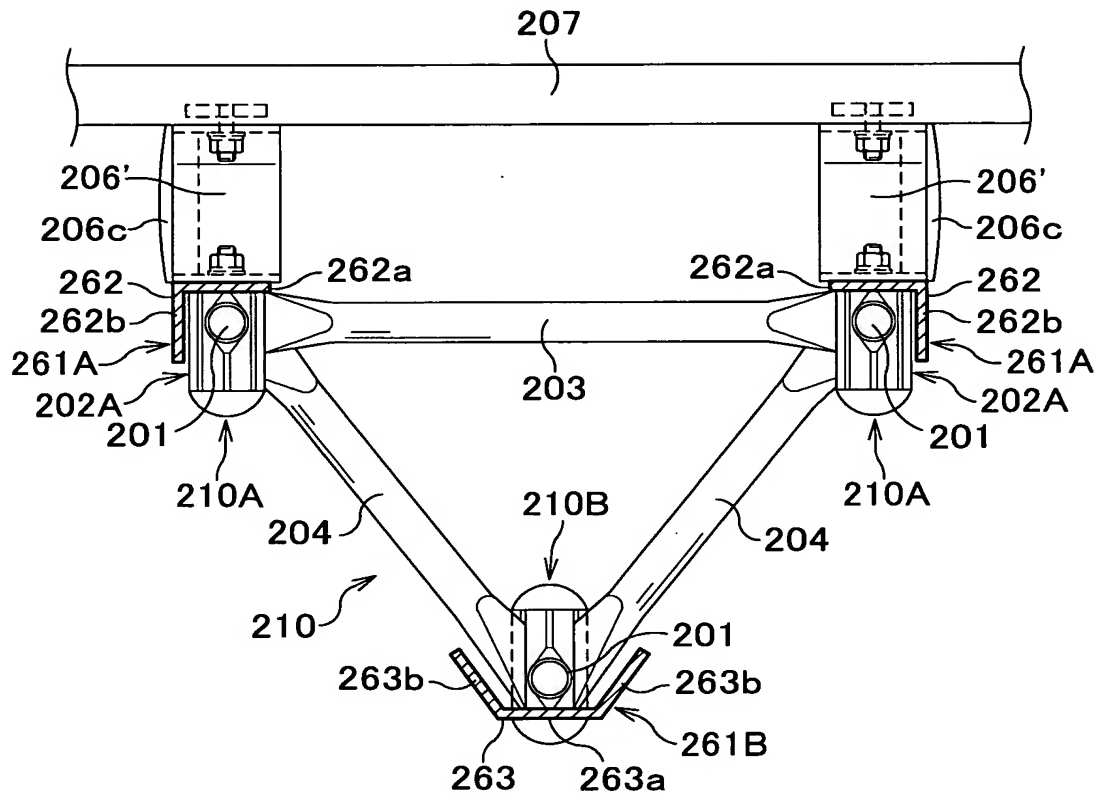
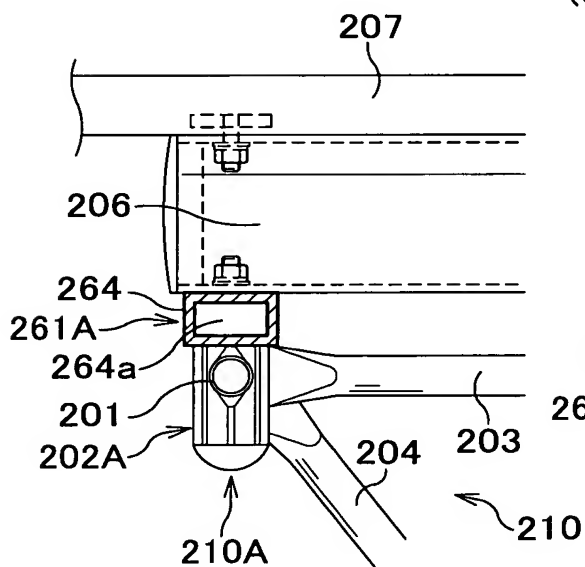


FIG. 80

(a)



(b)



(c)

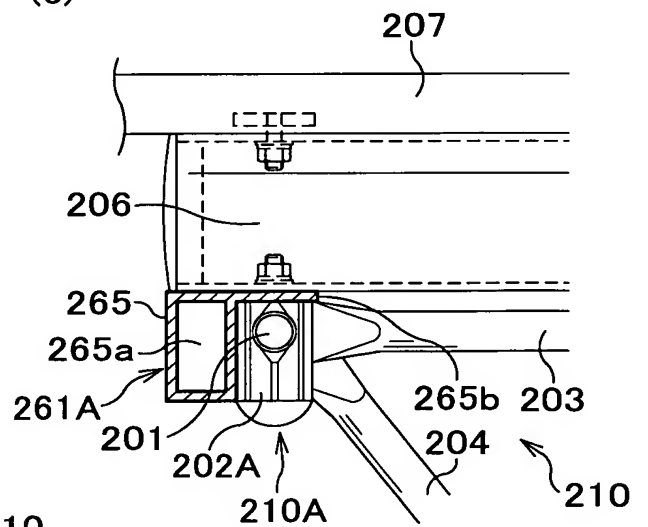




FIG. 81

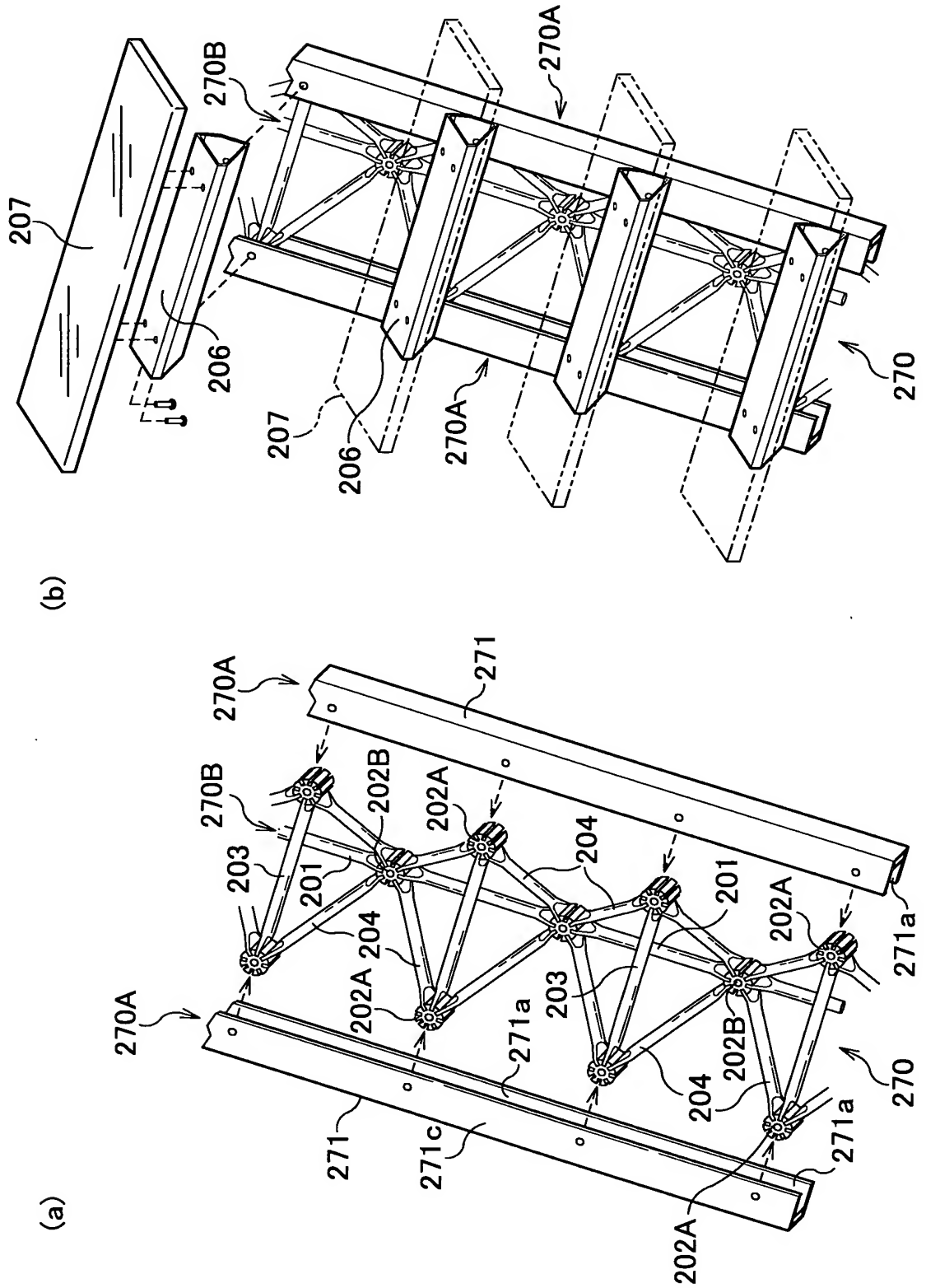
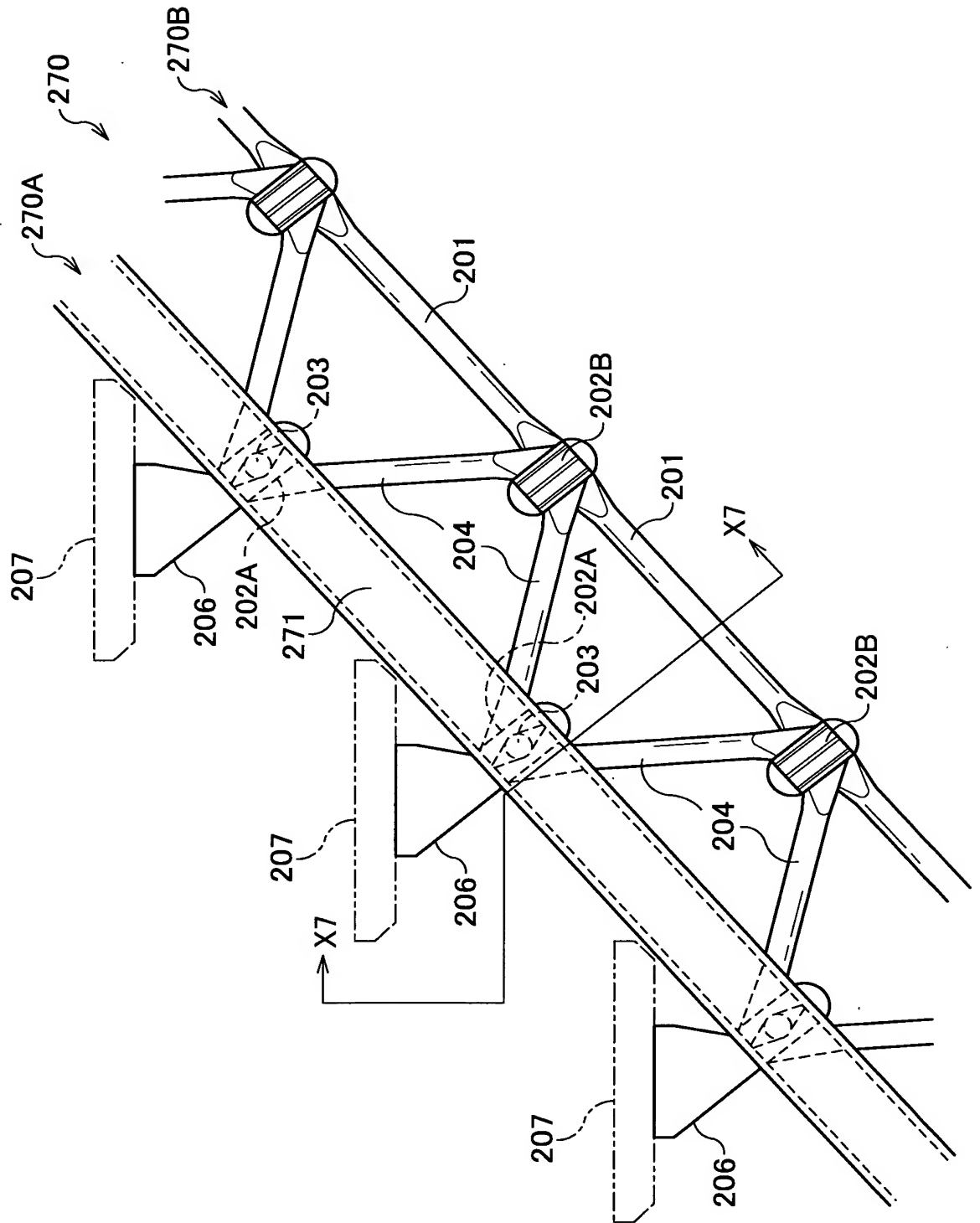


FIG. 82



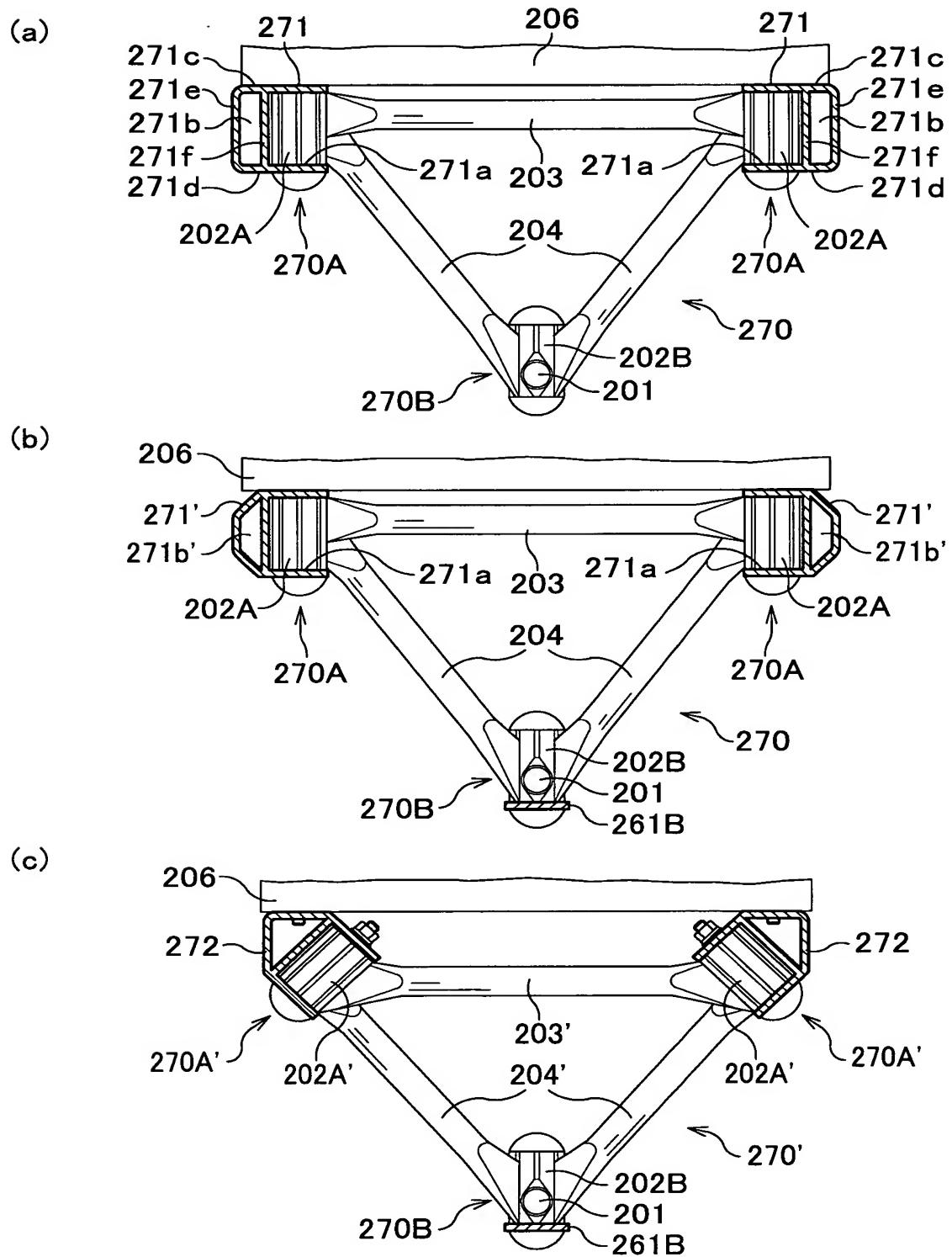


FIG. 84

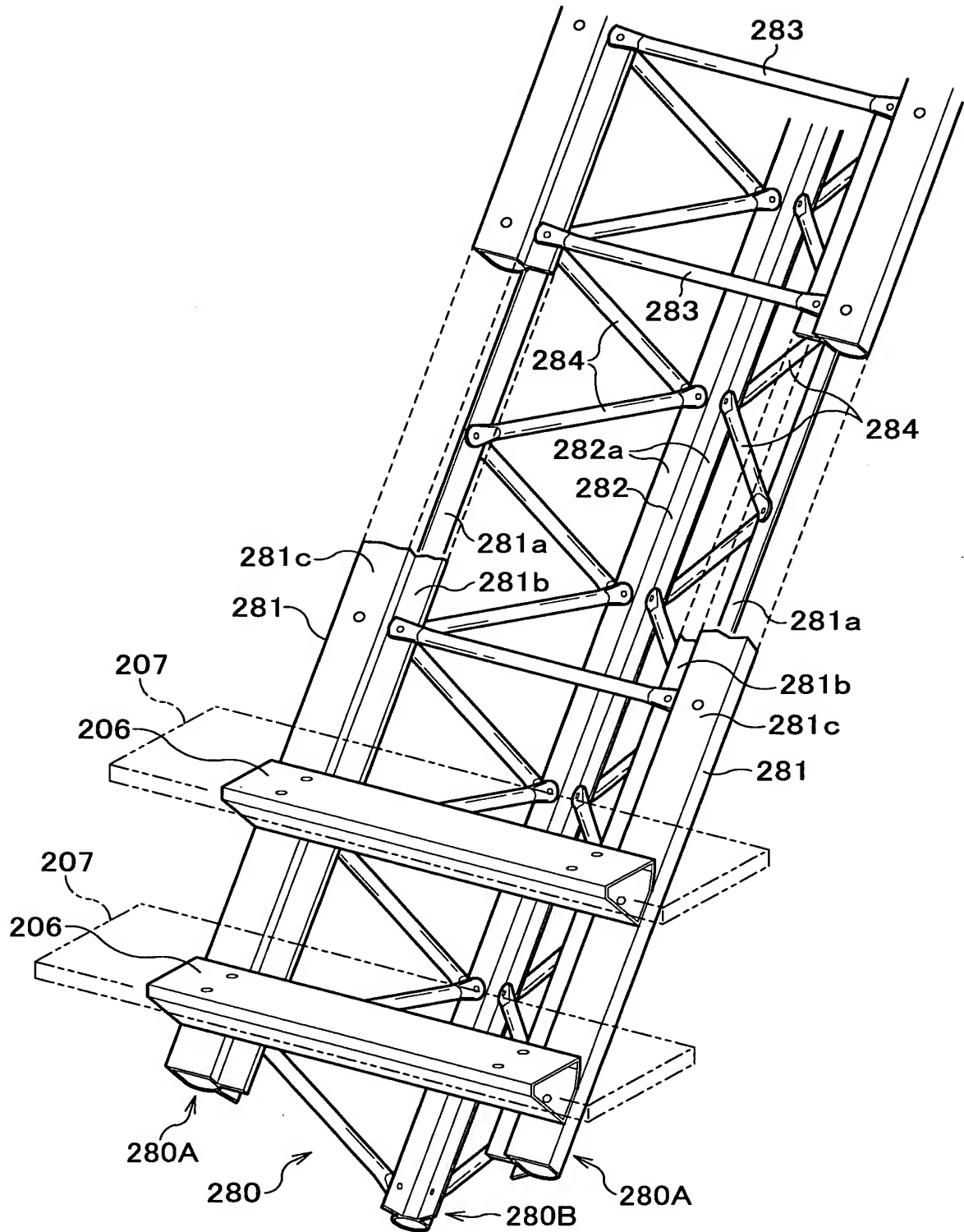


FIG. 85

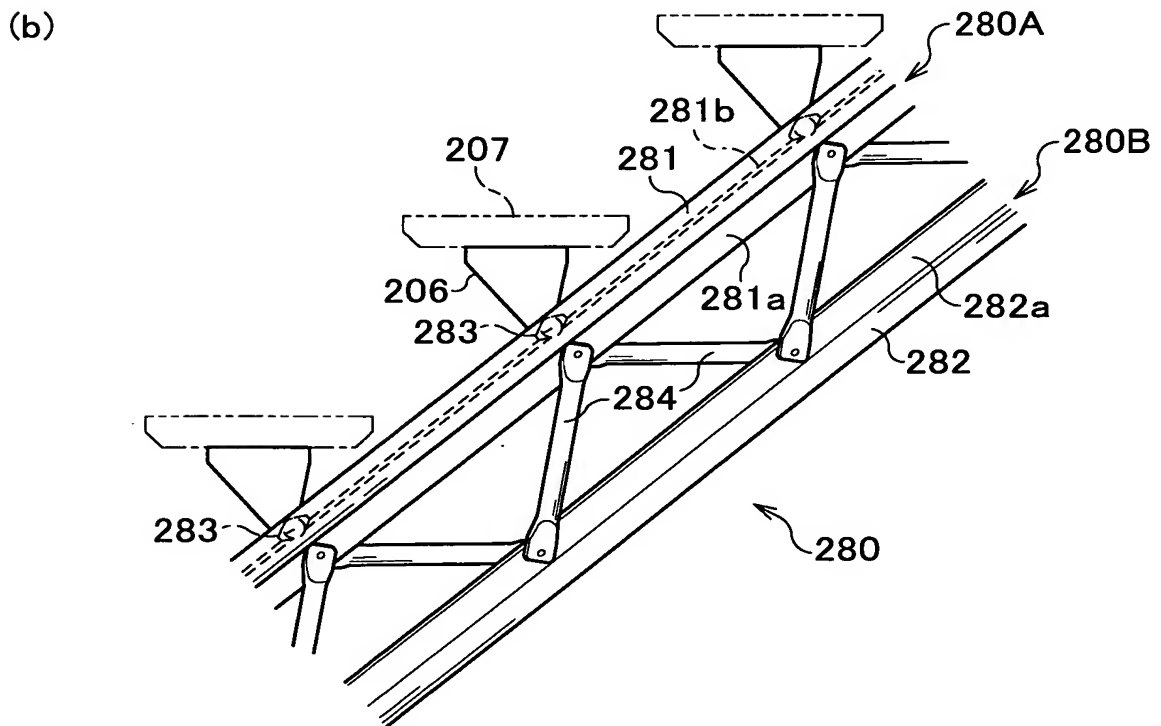
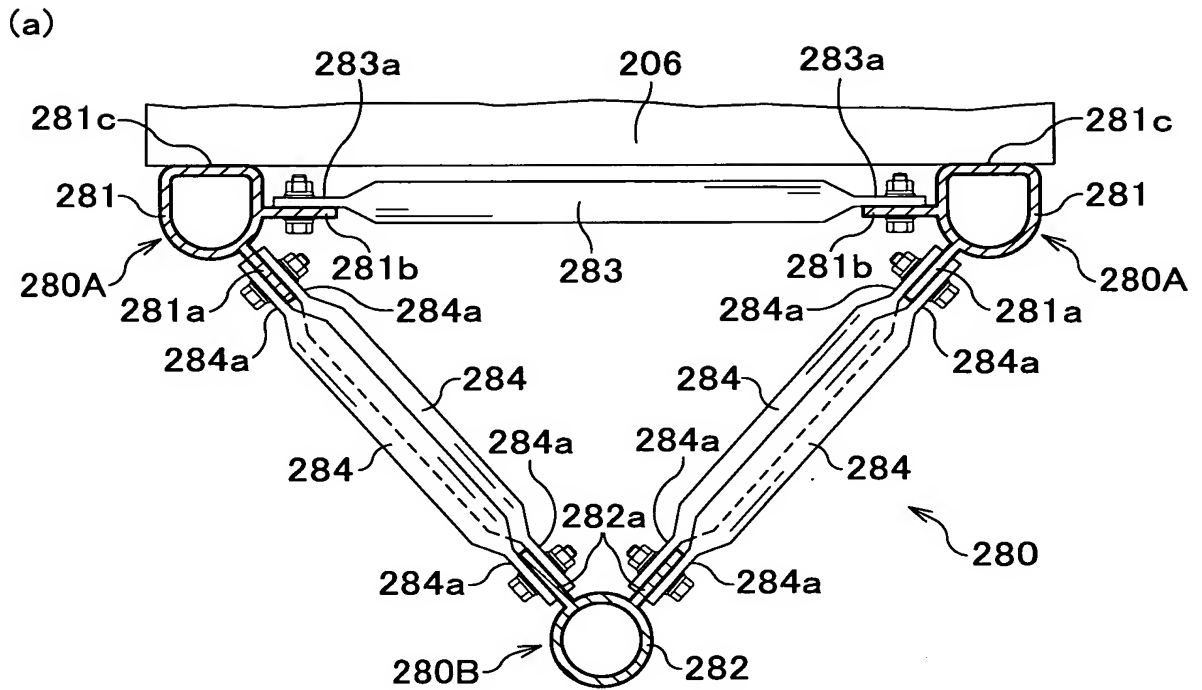


FIG. 86

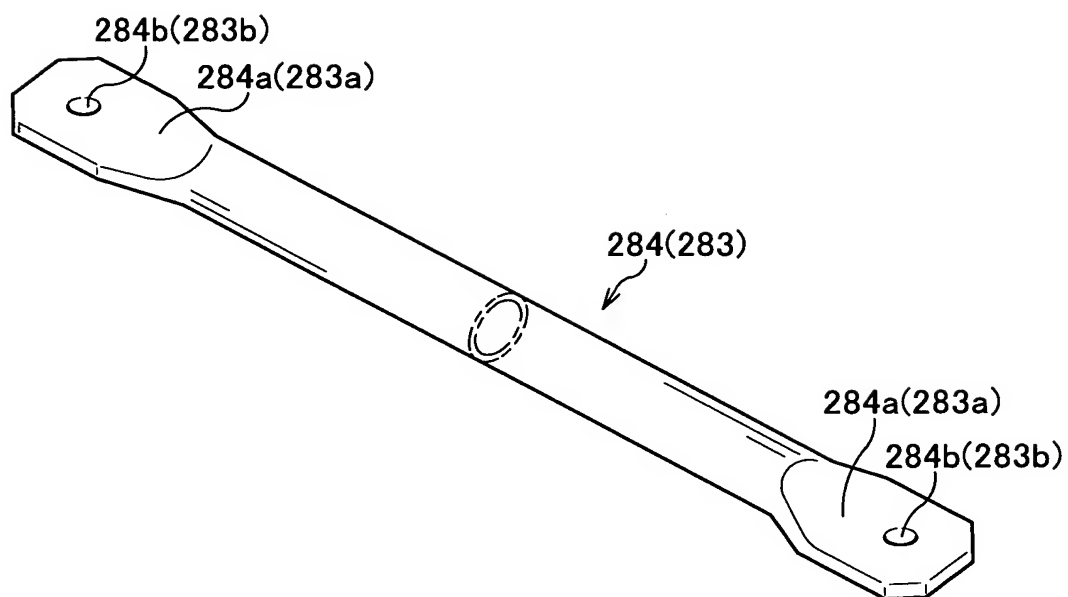




FIG. 88

